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RELIGIOUS

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By H. F. MUSSCHE

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I. RELIGIOUS ARCHITECTURE

A. TEMPLES AND SANCTUARIES

1. a-b. THERMOS — SANCTUARY OF APOLLO (Photographs German Archaeological Institute at Athens). Plate 1a: general view of the sanctuary from the north; Plate 1b: the Temple of Apollo from the south. In 1897, Greek archaeologists began a series of excavation campaigns, in the course of which numerous buildings dating from the Helladic to the Hellenistic period were brought to light. The two temples in question are built along a north-south axis. The archaic Temple of Apollo, 5 x 15 columns, measures 12.10 m. by 38.20 m. The spacing of the columns on the short sides is 2.82 m., on the long sides 2.73 m.; there is no angle contraction. The inner structure consists of a long narrow naos, 4.70 m. by 25.40 m., without pronaos, but with a deep opisthodomus of 4.70 m. by 4.90 m. A row of respectively 10 and 2 columns stands on the axis of the naos and the opisthodomus. The column bases were of stone, their shafts of wood, the wall plinths of natural stone and the rest of mud bricks. The entire roof structure was of wood, faced with terracotta tiles. The metopes consisted of painted terracotta pinakes. The triglyphs, the cornice and the painted antefixae were also of terracotta. Date: built in 620 B.C., renewed in 550, rebuilt in stone in the Vth century, entirely rebuilt after 206 B.C. (the dimensions always remained the

Under this temple were found the remains of temple B, which was also an oblong building, 7.30 m. by 21.40 m., on a north-south axis with an entrance on the south. The walls are not rectilinear, but curve outwards (0.30 m. on the north side). The edifice consists of a prodomus (8.15 m. long), a central room (9.13 m. long) and a narrow back room (2.20 m. long). The edifice was entirely surrounded by a series of flat stones (18 of which have been found), which described a partial ellipsis. The space between the slabs varies from 1.20 m. to 1.60 m. Opinions differ as to the function of these slabs: the archaeologists are no longer so inclined to regard them as a peristasis, but rather as a series of slabs on which beams were mounted obliquely to meet the outward pressure of the roof on the walls.

Date: first half of the IXth century B.C.

Bibl. The bibliography is too vast to permit of listing even the important works here. For a complete and recent survey see H. Drerup, Zu Thermos B, Marburger Winckelmann-Programm (1963) pp. 1-12. Excavation reports: Γ. Σωτηριάδης, 'Ανασκαφαὶ ἐν θέρμφ, 'Εφ. 'Αρχ. (1900) col. 161-122; (1903) col. 71-96; Πρακτικά (1906) p. 136-139. Κ. Α. 'Ρωμαίος, 'Ανασκαφαὶ ἐν θέρμφ, Δελτ. 1 (1915) p. 225-279; Δελτ. 6 (1920/21) p. 168-172; Δελτ. 9 (1924/25) p. 4-7; Πρακτικά (1931) p. 61-70.

2—3a. OLYMPIA — HERAEUM (1959/1960). PLATE 2a: view from the east; PLATE 2b: the southeast corner; Plate 3a: pronaos. The Doric hexastyle peripteros (6 x 16) of 18.75 m. by 50.01 m., with a pronaos, a naos and an opisthodomus, was built in the northwest of the Altis. Part of the foot of the Kronos Hill was dug away and thus, partially with the loose earth, a small terrace was formed. The result was that the southwestern part of the temple came to stand on the softer ground. Despite the fact that the foundations on that side were made deeper and wider, the western stylobate has sunk 0.18 m. deeper than the eastern. The foundations consist of poros blocks and shingle cemented with mud. The blocks of the stylobate are irregular. The columns also differ widely; their base diameter varies from 1.02 m. to 1.29 m., but the distance from the columns to the outside of the stylobate is the same all round. They all have 20 flutes, except for one on the south side which only has 16. The column drums are of very varied height; some of the columns are monolithic. Amongst the surviving capitals, there are no less than 12 different types. This peculiarity is the result of the gradual replacement of the wooden columns by stone columns. The axial spacing is 3.26 m. on the long sides and 3.56 m. on the short. There is a 0.20 m. to 0.30 m. contraction of the angle columns. Nothing is left of the wooden entablature. The contraction of the angle columns indicates that the temple was adorned with inner structure is triglyphs. The harmoniously into the peristyle: the exterior of the lateral walls stands precisely along the axis of the second and the fifth column of the short façades. 2 columns rose between the wooden antae in the pronaos. The naos has 2 parallel stylobates, on each of which stood 4 columns (without fluting, diameter 0.88 m.) alternated with 4 small cross-walls, so that the stylobate communicated with the wall of the naos. Both these inner columns and the cross-walls stood in the axis of a column of the pteron (for the support of the continuous wooden roof-beams). Of the inner edifice, there remain the orthostates 1.18 m. wide and 1.04 m. high, on which stood a superstructure of mud bricks reinforced by wooden beams. The construction of the opisthodomus is entirely similar to that of the pronaos.

Date: 600/590, destroyed in A.D. 426 (edict of Emperor Theodosius II).

Bibl. E. Curtius & F. Adler, Olympia, Die Ergebnisse der von dem Deutschen Reich veranstalteten Ausgrabungen. II Die Baudenkmäler (Berlin 1892); see W. Dörpfeld, III Das Heraion, p. 27-36.

3b. AKRAGAS—sanctuary of the chtho-NIAN DIVINITIES, ROUND ALTAR (1961). The sanctuary of the chthonian divinities stands to the west of the Porta Aurea in the southwestern part of the ancient town. It is entirely enclosed within a peribolos, of which a few elements on the west side are still standing. In this area, a number of small structures was raised over the years without the slightest natural order: a series of isolated altars, sometimes grouped in pairs, one of which was always round and the other square—the largest of these round altars, measuring about 8 m. in diameter, consists of three rings of stones, the sacrifices being made in the smallest circle, which was hollowed out inside—two small open air sanctuaries, one with two, the other with three chambers and each edifice containing two altars; beside these, three tiny temples akin to the megaron type of temple, two of them comprising a pronaos, a naos and an adytum, the third a large pronaos with columns and a naos; finally, a multitude of bothroi and favissae.

Date: according to the majority of authors late VIIth or early VIth century, according to others after the Greek colonization, i.e. after 582 B.C.

Bibl. P. MARCONI, Agrigento arcaico (Rome, 1933).

4a-b. SELINUS—TEMPLE C (1961). PLATE 4a: north façade; PLATE 4b: in the left foreground, the south side of the crepis, in the background, the interior of the north façade. Temple C is the oldest surviving temple at Selinus and the largest on the acropolis. It is a Doric hexastyle peripteros (6 x 17) of 23.93 m. by 63.72 m. The crepis has 3 steps, except on the east side, where a stairway of 8 steps takes up the whole width. The axial spacings of the columns vary from an average of 3.86 m. on the long sides to 3.40 m. on

the short. Nor is their base diameter the same throughout: \pm 1.91 m. on the short and 1.81 m. on the long sides. They are 8.65 m. high. The columns on the east façade and the 7 adjoining them on the south side are monoliths, the rest are built up of drums. Five of the columns have 20 flutes, the rest 16. There is no angle contraction and the columns have no entasis. In front of the pronaos, the two third columns of the long façades are linked by a row of four columns. The inner structure is long and narrow (10.40 m. by 41.55 m.), thus the pteroma is very deep. The pronaos has no antae, but a doorway 4.55 m. wide preceded by a stairway of two steps. Another doorway almost as wide, with three steps, leads to the naos (without inner columns), behind which is an adytum. In relation to the height of the columns, the entablature is extremely heavy: 4.48 m. The triglyphs are wide and the metopes narrow; consequently, the mutulae above the metopes have only three guttae in order to leave enough room for the viae. The metopes along the east side were decorated with reliefs. The identification of the temple is extremely doubtful (Heracles?).

Date: this is equally uncertain, the earliest: 570 B.C., most archaeologists accept 550/530 B.C.; the latest date for the metopes: 520 B.C. The anastylosis, of a highly contestable nature, dates from 1925-1927.

Bibl. Koldewey & Puchstein, p. 95-105.

5a. SAMOS—THE SOUTHERN FOUNDATION OF THE NAOS OF POLYCRATES' TEMPLE (Photograph German Archaeological Institute at Athens). The sanctuary of Hera stands on the west side of the Plain of Chora, about 6 km. west of the ancient town. The first colossal Ionic temple was built here by the architects Rhoikos and Theodorus of Samos shortly before the middle of the VIth century B.C. It was a dipteros (8 x 21) of 51 m. by 102 m. The walls and columns were of fine brown limestone and the richly profiled column bases of fine white limestone. Soon after its completion, this temple was burnt to the ground; shortly thereafter, however, Polycrates had a new temple built 40 m. to the west of it. Even the foundations of the older temple were transferred to the new site. The new temple was also a dipteros (8 x 24) of 52.40 m. by 108.70 m. with a double row of columns on the long sides, three rows of columns on the short sides and a double row of 5 columns in the deep pronaos. The foundations of the new temple, parts of which are still in place, consist of 13 layers of stones, 2.75 m. high, on which the superstructure rose. The column bases of Rhoikos' temple are incorporated in pairs, one pair every 4.50 m., the base drums and the tori separated, into the seventh layer. It has thus been possible to

recover 102 bases, which represent an important stage in the development of the Ionic base.

Bibl. No definitive excavation reports have yet been published. Provisional publications: E. Buschor, Heraion von Samos: Frühe Bauten, Ath. Mitt. 55 (1930) p. 1-99. H. JOHANNES, Die Säulenbasen vom Heratempel des Rhoikos, Ath. Mitt. 62 (1937) p. 13-37. On Polycrates' temple: O. REUTHER, Der Heratempel von Samos (Berlin, 1957).

5b. CORINTH—TEMPLE OF APOLLO (1961). Of this temple, built on a slight eminence to the north of the agora, 7 columns at the southwest corner, surmounted by part of the architrave, are still standing. The temple is a Doric hexastyle peripteros (6 x 15). According to the calculations, the dimensions of the stylobate (with curvature) were 21.58 m. by 53.82 m. Thanks to the fact that the greater part of the foundations was hewn out of the rock, it has been possible to reconstitute the unusual groundplan as follows: a pronaos facing east with two columns in antis, a naos with 2 rows of 4 columns each, a completely separate square chamber open to the west with 4 inner columns and, preceding this, another pronaos with 2 columns in antis (the function of the western part is uncertain). The columns of the peristasis are monoliths 6.37 m. high and the capitals are 0.86 m. high. The base diameter of the angle columns is 1.72 m., that of the others 1.64 m. The axial spacings, hard to determine due to the shifting of some of the columns by earthquakes, were probably 3.48 m. at the angles and 3.75 m. elsewhere on the long sides; 3.77 m. at the angles and 4.00 m. elsewhere on the short sides and 4.02 m. between the central columns. The columns number 20 flutes and have no entasis. The architrave is 1.30 m. high, none of the friezes remains in situ, a few fragments of the triglyphs have been recovered; only a small number of the metopes was adorned with sculpture. The temple was built of poros and was originally faced with a layer of hard white stucco.

Date: on archaeological grounds ca. 540 B.C., later restored by the Romans.

Bibl. R. Stillwell, The Temple of Apollo. Corinth vol. I (Cambridge Mass., 1932) p. 115-134. S. S. Weinberg, On the Date of the Temple of Apollo at Corinth, Hesp. 8 (1939) p. 191-199.

6a. SAMOS—TEMPLE B (Photograph German Archaeological Institute at Athens). About 50 m. northeast of the Temple of Hera, lie the ruins of 5 small temples, of which temple B is the easternmost. The excavations have been carried out by the German Archaeological Institute at Athens, in this regards both its foundations and a few of the indicates that this section was never covered over.

remains of its superstructure. Two different building periods are clearly distinguishable: α) an elongated temple in antis with a posterior annex (Plate 6a in the foreground); β) a shorter broader edifice on a higher level with an almost square naos (Plate 6a left: the west wall). The maximum external dimensions of α are 6.70 m. by 11.96 m. The naos is 8.05 m. long. The foundations consist of white limestone slabs, on which lay, for the first time here, a real euthynteria. Part of the paving of carefully jointed white stone slabs has remained intact; in the centre, the base of the cult statue sticks up 0.23 m. out of the paving. The east wall of β was moved up 1.20 m., its maximal external dimensions are 8.72 m. by 10.60 m.; the naos measures 7.32 m. by 6.65 m. and is therefore broader than it is long. It is not certain to which deity the temple was dedicated; however, since its axis is directed towards the large altar, it was evidently associated with the sacrificial proceedings at the main altar.

Date: a: ca. 560 B.C., perhaps shortly after the completion of Rhoikos' great temple; β: late Hellenistic.

Bibl. O. ZIEGENAUS, Die Tempelgruppe im Norden des Altarplatzes, Der Tempel B, Ath. Mitt. 72 (1957) p. 95-109.

6b. NAXOS—TEMPLE (1960). The ruin lies on an islet, which is joined by a narrow strip of land to the main island. It is the oldest known Ionic double temple in antis. In 1923, the Greeks carried out excavations in what remained after a systematic plundering of the ruins. The depth of the foundations, which is adapted to the terrain, increases towards the southeast. The foundation walls stand on a thin layer of mud clay, which rests on the rough-hewn living rock. They consist of two smooth masonry walls and a back filling of irregular stone slabs with clay as a cement. From the manner in which the rock is hewn, it may be deduced that the columns between the antae stood on separate foundations. The dimensions are as follows: 13.77 m. by 34.92 m., the depth of the pronaos 4.90 m., the length of the naos 15.62 m. and the depth of the opisthodomus 9.50 m. Thanks to the uncovering of the foundations in the southern half of the naos and the opisthodomus, it has been possible to determine the precise layout of the interior. In the naos stood four supports, so that the almost square space was divided into three aisles. Of the superstructure, there remains only the monumental gateway of the opisthodomus: both gate-posts and the lintel are monoliths; its inner dimensions are 5.95 m. in height and 3.65 m. in width. This gateway was never comsector, not without interruptions, since 1925. pleted: large lifting bosses have remained standing of the five, temple B is the best preserved, as in front and also atop the lintel, a fact which Of the walls, there remain only a few stones, of the column bases, an almost complete torus and two fragments have been found. The identification is uncertain; the temple was perhaps dedicated to Dionysos or Apollo.

Date: second half of the VIth century (on stylistic grounds).

Bibl. G. Welter, Altionische Tempel, Ath. Mitt. 49 (1924) p. 17-22.

7a-b. PAESTUM—TEMPLE OF HERA I (the so-called Basilica) (1961). Plate 7a: the northeast side; PLATE 7b: the naos from the west. The temple. the oldest of the 2 temples in the southern temenos of Hera, is a Doric enneastyle peripteros (9 x 18), measuring 24.51 m. by 54.27 m.; the crepis has 3 steps. The columns of the peristasis, 6.45 m. high and with a base diameter of 1.45 m., have a pronounced entasis and are strongly tapered. The flutes end in an apophyge and the necks of the columns are diversely decorated. The interaxial measurements are 2.87 m. on the short sides and 3.10 m. on the long. The entablature has largely disappeared, but it likewise diverged from the pure Doric order: it is decorated with a Lesbian cymatium instead of with a taenia and has no regulae or guttae; it does, however, have triglyphs and metopes. The inner structure, of which practically nothing remains, consisted of a pronaos with 3 columns in antis; 2 doors led into the naos, which was divided into two aisles by 1 row of 7 columns (of the same base diameter as those of the peristasis); behind this was an adytum.

Date: ca. 550/530 B.C.

Bibl. KOLDEWEY & PUCHSTEIN, p. 13-18. F. KRAUSS, Paestum, Basilika. Der Entwurf des Grundrisses. Festschrift für C. Weickert (Berlin, 1955) p. 99-109.

8a-b. PAESTUM—TEMPLE OF ATHENA (the socalled Temple of Ceres) (1961). Plate 8a: the south façade; Plate 8b: the west façade. The temple stands on a small artificial hill in the northern temenos, in the centre of the ancient city. It is a Doric hexastyle peripteros (6 x 13). The foundations, of unequal depth and descending to a maximum of 3.78 m., do not rest on the natural rock, but on a bed of pure sea sand. The naos and the colonnade have separate foundations. The crepis has 3 steps of approximately equal height and the stylobate measures 14.53 m. by 32.88 m. In almost every case, the abutment joints of the stylobate blocks lie along the axes of the columns. The columns, which are of limestone, are built up of 4 or 5 drums and in 2 cases 6. Their total height is 6.12 m., that of the shaft 5.49 m., their base diameter 1.26 m. They stand perpendicularly, the stylobate has no curvature and the interaxial measurement is 2.62 m. The columns are with

entasis, are strongly tapered and have 20 flutes which terminate in a moulding of 40 leaves. The capitals are broad and monolithic. The architrave, which is 1.04 m. high, is in two layers: the lower of limestone, the upper of sandstone, and is adorned with sculptural profiles. The frieze, which is 0.92 m. high, consists of unadorned metopes 0.76 m. wide (the angle metopes are 0.98 m.) and triglyphs of 0.55 m. Two metopes are carved in every block, in such a way that, in each case, the abutment joints of these blocks fall over the centre of an architrave block, whereby the main thrust of the frieze blocks rests above the columns. Since this solution is impossible above the angle columns, the angle metope is prolonged. The frieze is surmounted by a flat slab adorned with a sculptural molding. The entablature is completed with a large egg-and-tongue cymatium, a pearl moulding and an abacus. On both short sides, the geison soars upwards to the ridgepole, there is no horizontal member and square coffers take the place of the mutulae. The inner structure consists in the first place of a very extended pronaos, in turn divided into an outer section flanked by 6 Ionic columns, 4 of them facing the façade, and an inner section between the antae, which terminate in three-quarter columns. The columns are 7.38 m. high and their base diameter is 0.82 m. The naos is not divided into aisles; there are stairways to the right and left of the entrance. The external dimensions of the naos are 7.63 m. by 24.16 m. The temple is built of local limestone and the delicately carved elements are of sandstone. Only a very few fragments of the stucco facing and the painted decoration remain.

Date: ca. 530/510 B.C.

Bibl. F. Krauss, Die Tempel von Paestum, erster Teil, I. Lieferung, Der Athenatempel (Berlin, 1959).

AKRAGAS—TEMPLE B 9a-b. (OLYMPIEUM) (1961). Plate 9a: foundations on the southeast side; PLATE 9b: altar. The largest of all Doric temples, which once rose directly to the west of the Porta Aurea, was demolished in the XVIIIth century in order to build the harbour-mole of Porto Empedocle. Both in its groundplan and construction, it differed widely from the classic Doric temple. It was a hexastyle pseudo-peripteros with 7 x 14 half-columns and measured 52.74 m. by 110.10 m. The foundations, up to 6 m. deep, form a rectangle of 56.30 m. by 113.45 m.; they also served to level the ground, which slopes downwards from south to north. On these foundations lay a substructure of 5 steps. The diameter of the half-columns (with flutes) is 4.30 m. and their height 21.57 m.; the interaxial measurements are smaller on the short sides than on the long. These half-columns were linked by a curtainwall, on the inner face of which a half-

pilaster corresponded to each half-column. At just above half its height, the curtain-wall was deeply recessed; a series of niches was thus formed, in which gigantic Atlantes (7.65 m. high) were placed as caryatids. The interior was also unconventional; the enormous space was divided into 3 aisles by 2 rows of pillars, which corresponded to the outer columns. They were 3.50 m. wide and 23.36 m. high and surmounted with Doric antacapitals. These pillars were also linked by curtainwalls which, however, may not have been carried to the top of the edifice. The last pillars in each row were not linked to the third and fifth halfcolumns on the east façade. The entrances on the east façade were somewhat inconspicuously located beside the angle columns. The temple was never completed and it is evident that part of it was never roofed. The altar stood \pm 50 m. east of the temple. At present, only a portion of its foundations remains. It measured 56 m. by 12 m. and thus extended over the whole breadth of the temple.

Date: building began after 480 B.C. (victory over Carthage), and was discontinued about 406 B.C. *Bibl.* Koldewey & Puchstein, p. 153-166. F. Krischen, *Das Olympieion von Akragas*, *AA* (1942) cols. 1-19.

10a. METAPONTUM—TEMPLE HERA (1961). View from the south. The ruins of the temple, of which 15 columns are still standing: 5 on the south side and 10 on the north side, lie 3 kilometers north of the ancient town. The temple was a Doric hexastyle peripteros (6 x 12) of 16.06 m. by 33.46 m. The columns, which are 5.13 m. high with a base diameter of 1.06 m., have a pronounced entasis. The transition from shaft to capital is curious: the diminution occurs not in the shaft, but in the echinus, so that the flutes terminate in the echinus itself. The interaxial measurements are huge: 2.95 m. on the short sides and 2.92 m. on the long. The inner structure comprises a pronaos, a naos without inner columns and an adytum. Little is known about the superstructure, of which only the architrave remains.

Date: ca. 500 B.C.

Bibl. Koldewey & Puchstein, p. 35-37.

10b. AKRAGAS—TEMPLE A (1961) (the so-called Temple of Heracles). View of the southern peristasis. Temple A, a Doric hexastyle peripteros (6 x 15) of 25.28 m. by 67.04 m., stands directly eastward of the Porta Aurea. It is partially built on an artificial terrace, which rises slightly towards the north and west sides. The crepis has 3 steps and a stairway with 8 steps extends over the whole length of the east side. The columns, which are 10.07 m. high with a base diameter of 2.08 m., have 20 flutes. The interaxial measurements are

the same on all four sides: 4.61 m.; there is contraction of the angle columns, but only on the short sides: 4.50 m. The inner structure, which is built into the peristyle in the classical manner: the walls of the naos stand along the axis of the second and fifth columns of the short façades, comprises a pronaos with 2 columns in antis and a naos which, though 11.83 m. wide, has no inner columns. On either side of the entrance to the naos, there were 2 stairways leading to the roof. An opisthodomus with 2 columns in antis completes the edifice. The identification of this temple is totally uncertain (Aesculapius?); the name "Temple of Heracles" was erroneously given to it by Cicero.

Date: ca. 500 B.C.

Bibl. Koldewey & Puchstein, p. 138-141.

11—12. AEGINA—TEMPLE OF APHAIA (1963). PLATE 11a: the east façade; PLATE 11b: the naos from the west; Plate 12a: the centre of the south façade; PLATE 12b: the southeast side of the naos; PLATE 12c: the eastern half of the south façade. The temple is built on the crest of a wooded hill. which rises at the northeastern tip of the island, It is a Doric hexastyle peripteros (6 x 12) of 13.77 m. by 28.15 m. with a pronaos, a naos and an opisthodomus. The foundations, which consist in large rectangular blocks of stone, also serve to level the ground: on the east side, the euthynteria rests on the bare rock, the foundations get progressively deeper towards the west and, in the northwest corner, the euthynteria rests on 6 layers of stone. The joints in the crepis are all placed over the centre of an underlying stone. A broad incline paved with stone slabs gives access to the east side of the temple. The stylobate, without curvature, is extremely carefully finished and the dimensions of the blocks correspond to the disposition of the peristasis: one column rising in the centre of every other block. The interaxial column spacing is 2.61 m. on the short sides and 2.56 m. on the long. The slender columns are 5.27 m. high with a base diameter of 0.99 m., that of the angle columns is 1.01 m. Each one has 20 flutes and leans 0.02 m. inwards. There is a simple contraction of the angle columns of 0.22 m. All the columns are monoliths with the exception of the second, third and fourth column on the north side (numbering from the east side), which are built up of drums of unequal size. The inner structure is not altogether harmoniously disposed within the peristyle: its walls protrude 0.20 m. beyond the axis of the second and fifth columns. The naos is narrow and divided into 3 aisles by 2 rows of 5 columns: the central aisle is 3.05 m. wide. The lower row of columns is surmounted by an architrave adorned with regulae and guttae. The architrave is in turn surmounted by a second row of columns, whose base diameter is slightly less than the diameter of the neck of the lower columns. After the completion of the temple, a door leading to the opisthodomus was pierced outside the axis of the naos. The temple is built of local limestone and faced with a very thin coating of polychromed stucco.

Date: ca. 490 B.C.

Bibl. A. Furtwängler, Aegina, Das Heiligtum der Aphaia (Munich, 1906).

13-14. SELINUS—TEMPLE E (1961). PLATE 13a: the west façade; Plate 13b: the south façade; PLATE 14a: interior view of the pronaos and the back of the east façade, taken from the naos; PLATE 14b: detail of the columns of the opisthodomus. Temple E is the southernmost of the 3 temples built on the Plateau of Marinella to the east of the acropolis. It is a Doric hexastyle peripteros (6 x 15) of 25.32 m. by 67.74 m. Its architecture shows a harmonious blending of classic Doric principles with local traditions. The crepis has 3 steps and a stairway of 9 steps leads to the pteron on the east side. The interaxial measurements of the columns are 4.71 m. and only 4.40 m. for the angle columns. The columns are 10.15 m. high with a base diameter of 2.27 m. and the entablature is 4.47 m. high. The inner edifice is very meticulously disposed within the peristasis: the external face of the long walls stands along the prolongation of the axes of the 4 second columns on the short façades and the front of the antae of the pronaos is in line with the east face of the 2 third columns on the long façades. This elongated inner structure comprises a pronaos with 2 columns in antis and steps leading up to the naos (lying 1.30 m. higher than the pronaos), which measures 14.14 m. by 49.38 m. and has no inner columns; from the naos, another 2 steps lead to the adytum; behind this lies the opisthodomus with 2 columns in antis. Above the pronaos and the opisthodomus was a frieze of triglyphs and metopes, each set of triglyphs framing a row of 6 sculptured metopes. The temple was formerly considered to be an Heraion; however, today the archaeologists are more inclined to regard it as a temple of Dionysos. Date: not established with certainty, since opinions differ rather widely: from 490 B.C. to 450 B.C., though the majority agree on 480/460 B.C.

Bibl. Koldewey & Puchstein, p. 127-131.

15. OLYMPIA—(Photograph German Archaeological Institute at Athens). General view of the southeastern section of the Altis after the excavations of 1875-1881. Left, the Echo Hall; right foreground, the Metroum; centre right, the Temple of Zeus with, to the east of it, the many votive offerings; centre background, the

Bouleuterion and the southern thermae. The Leonidaeum, above right, was not excavated.

16a-b. OLYMPIA—TEMPLE OF ZEUS (1960). PLATE 15: general view; PLATE 16a: the north side; PLATE 16b: the west side. The Temple of Zeus is a Doric hexastyle peripteros (6 x 13) of 27.68 m. by 64.12 m., with a pronaos, naos and opisthodomus, built in the southwest corner of the Altis. The foundations have a total height of 4 m., of which only 1 m. lies below the original level of the Altis. The ground was therefore raised 3 m. to the level of the foundations, so that the temple appeared to be standing on a small mound. The foundations consist of separate walls for the peristyle and the inner edifice, the spaces in between being filled up with earth. The crepis has 3 steps. The stylobate is built with large blocks 2.60 m. square, so that the columns rise in the centre of every other stylobate block. The columns are built up of a varying number of drums, the maximum number being 15. It has been possible to determine that the total height of the columns was 10.51 m.; their base diameter is 2.21 m. on the long sides and 2.25 m. on the short. The interaxial measurements are 5.23 m. on the short sides, 5.22 m. on the long and respectively 4.79 m. and 4.75 m. at the angles. The columns have 20 flutes; those on the long sides lean 0.062 m. inwards, the angle columns only 0.017 m.; those on the short sides stand erect. The architrave is 1.75 m. high. The walls of the inner edifice consist of a socle of high orthostates, on which the rest of the wall wasbuilt with ordinary stones. The pronaos and opis thodomus are identical, each having 2 colums in antis. Only the pronaos could be closed with lattices; the opisthodomus served as an assembly room, had a bench running round it and remained open. The columns of the pronaos and the opisthodomus were surmounted by a Doric entablature with an architrave, a frieze of metopes and triglyphs and a cornice which continued above the walls on the long sides. The 12 metopes (2 x 6) were adorned with marble reliefs representing the heroic exploits of Heracles. The naos, measuring 13.06 m. by 28.74 m., was divided into 3 aisles by 2 rows of Doric columns. Each row comprised 7 columns and 2 piers, which were surmounted by an architrave supporting a second row of columns. The architrave also supported a gallery which could be reached by 2 spiral staircases.

Date: begun in 470 under the direction of Libon of Elis and completed in 460. About 437 Phidias was commissioned to make a chryselephantine statue of Zeus, which necessitated several alterations to the naos.

Bibl. E. Curtius & F. Adler, Olympia, II; see W. Dörpfeld, II Der Zeustempel, p. 4-27.

17-18. PAESTUM—TEMPLE OF HERA 2 (the so-called Temple of Poseidon) (1959). Plate 17a: the east façade; Plate 17b: the naos from the east; Plate 17c: the approach to the south stairway; Plate 18a: the southern pteron from the east; Plate 18b: detail of the columns in the pronaos. This temple, which was built to replace the Temple of Hera 1, rises directly to the north of the latter. It is a Doric hexastyle peripteros (6 x 14) of 24.31 m. by 59.93 m. The crepis has 3 steps and the stylobate is curved. The columns are 8.88 m. high with a base diameter of 2.11 m. on the short sides and 2.03 m. on the long. The interaxial measurements are smaller on the short sides (4.47 m. and 4.29 m. at the angles) than on the long (4.50 m. and 4.36 m. and 4.22 m. at the angles, where there is a double contraction). The columns have entasis and 24 flutes. The inner structure comprises a pronaos with 2 columns in antis; 3 steps lead to the naos, which is raised 1.40 m. above the pronaos. On either side of the entrance to the naos are 2 stairways leading to the roof. The naos is divided into 3 aisles by 2 rows of 7 columns. The lower columns, which are 6.06 m. high and have 20 flutes, are surmounted by an architrave (0.86 m. high) which has neither regulae nor guttae, but is adorned with a continuous moulding; the ends of the architrave are supported on small half-pilasters engaged in the east and west walls of the naos. This inner architrave is in turn surmounted by a second row of columns (3.41 m. high), whose base diameter is less than the neck diameter of the lower columns. The columns in the upper row have 16 flutes and are crowned by another architrave (0.98 m. high). The total height of the naos is 11.32 m. Since there was no gallery, these inner columns served solely to support the ceiling and the roof. The entablature is 3.78 m. high and repeats the curvature of the stylobate. The problem of the metopes is solved by a single and double contraction of the angle columns, combined with an extremely subtle shifting over the whole length of the frieze. The temple was never decorated with sculpture. It is now identified as an Heraion.

Date: 460/450 B.C.

Bibl. Koldewey & Puchstein, p. 24-31. For a résumé of the excavations since 1952, with bibliography, see B. Neutsch, Archäologische Grabungen und Funde in Unteritalien 1949-1955, AA (1956), cols. 373-444.

19-20a. AKRAGAS—TEMPLE D (the so-called Temple of Hera Lacinia) (1961). Plate 19a: the west façade; Plate 19b: view of the interior from the west; Plate 20a: view of the interior from the east. The temple is built on a promontory at the southeast tip of the southern plateau. It is a Doric hexastyle peripteros (6 x 13) of 16.91 m. by

38.10 m. The foundations consist largely of an artificial terrace, which is highest (3 m.) on the north and south sides. The crepis has 3 steps and there is no curvature in the stylobate. The columns are 6.36 m. high with a base diameter of 1.39 m. on the short sides and 1.33 m. on the long. The interaxial measurements are larger on the short sides (3.12 m. and 3.03 m. at the angles) than on the long (3.06 m. and 2.98 m. at the angles). The entablature was \pm 2.90 m. high; the geison and sima have disappeared. The columns have 20 flutes and are without entasis. The inner structure is carefully positioned within the peristasis: the long sides stand along the axis of the second and fifth columns and the antae of the pronaos and the opisthodomus stand in the centre of the second intercolumniation on the long sides. The inner structure comprises a pronaos with 2 columns in antis, a naos without inner columns, but with a stairway to the roof on either side of the entrance, and an opisthodomus with 2 columns in antis. The temple is built of a local limestone and faced with a thin layer of white stucco. It is not known to whom it was dedicated.

Date: ca. 460/450 B.C., damaged in 406 B.C. and repaired in Roman times.

Bibl. Koldewey & Puchstein, p. 166-171.

20b. AKRAGAS—TEMPLE H OR TEMPLE OF ASKLEPIOS (1961). View from the northwest. This temple stands outside the ancient town, on the south side, near the confluence of the small Akragas and Hypsas rivers. It is a small Doric temple in antis of 10.70 m. by 21.70 m. The poor condition of the ground necessitated extremely massive foundations, which consisted of a network of walls, the whole broader than the edifice itself and at least 3 m. deep. The crepis shows a slight curvature and has 3 steps. The temple has only a pronaos with 2 columns in antis and a naos with a stairway leading to the roof on either side of the entrance. Two half-columns engaged in the outer rear wall of the temple, between the antae, form a sort of pseudo-opisthodomus. The temple is identified as a temple of Asklepios on the strength of a text of Polybios (I, 18), and also because it stands in the vicinity of a medicinal spring.

Date: second half of the Vth century B.C.

Bibl. Koldewey & Puchstein, p. 183-184. P. Marconi, Il Tempio di Esculapio, RIASA I (1929) p. 293.

21-22-23. BASSAE—TEMPLE OF APOLLO (1960). PLATE 21a: the west façade; PLATE 21b: the north façade; PLATE 22a: detail of the western crepis; PLATE 22b: the naos from the south; PLATE 23a: the east side of the naos and, at the far right, the entrance to the adytum; PLATE 23b: detail of the base of a half-column in the naos. Isolated at

11.30 m. in the Arcadian highlands, the temple was only discovered in 1765. It is a Doric hexastyle peripteros (6 x 15) of 14.48 m. by 38.24 m. Due to the fact that the foundations are somewhat defective, the floor has sunk in several places, and earthquakes have caused cracks up to 3 cm. wide. The crepis has 3 steps and there is no curvature in the stylobate. The edifice faces north, but has a slight deviation towards the NNE. The columns of the peristasis are 5.96 m. high with a base diameter of 1.16 m. on the north side and 1.12 m. on the other 3 sides. The interaxial spacing is greater on the short sides: 2.71 m., with an angle contraction of 2.50 m. on the north façade and 2.52 m. on the south façade, than on the long sides: 2.67 m. and 2.43 m. at the angles. The inner structure, comprising a deep pronaos, a naos with an adytum and a deep opisthodomus, is particularly noteworthy. In relation to the long peristasis, it is fairly short: the antae of the pronaos and the opisthodomus (both of which have 2 columns in antis) are in line with the third columns on the long sides. On a low stylobate on either side of the naos stand 4 Ionic half-columns, which are perpendicularly attached to the wall by short spur walls. The bases of the columns are extremely broad, so that their diameter is almost double of that of the shaft. The 2 volutes of the capitals are linked by a convexly curved astragal; there is no abacus. The division between the naos and the adytum is formed by 2 half-columns, which are attached to the walls by diagonal spur walls; another, isolated column stands between the 2, in the axis of the naos; these 3 columns were crowned by the oldest known Corinthian capitals. The adytum has a door opening onto the eastern pteron. The columns in the naos supported an Ionic entablature adorned with a carved Ionic frieze. The pronaos and opisthodomus were surmounted by friezes of triglyphs and metopes, the 6 latter adorned with relief carvings. The temple is built of local limestone, while some of the subsidiary elements were of marble: the capitals of the inner columns, the facing-slabs of the superstructure on the short sides, the roof tiles and the sculpture. It is now generally presumed that Iktinos was the architect.

Date: 450/425 B.C.

Bibl. is very extensive and, in many cases, of a polemic nature. The most important and most recent publications (most of which contain the older bibliography) are: F. Eckstein, Iktinos, der Baumeister des Apollontempels von Phigalia-Bassai, in Θεωρία, Festschrift für W. H. Schuchhardt (Baden-Baden, 1960) p. 55-62. A. Mallwitz, Cella und Adyton des Apollontempels in Bassai, Ath. Mitt. 77 (1962) p. 140-177. G. Roux, L'architecture de l'Argolide aux IVe et IIIe siècles av. J.C. (Paris, 1961) p. 21-56.

24-25. ATHENS — TEMPLE OF HEPHAISTOS (THESEION) (1961). PLATE 24a: the west façade;

PLATE 24b: the west and south façades; PLATE 25a: detail of the pronaos; Plate 25b: detail of the opisthodomus. The temple, which stands on the Kolonos Agoraios, to the west of the Agora, is a Doric hexastyle peripteros (6 x 13) of 13.71 m. by 31.78 m., comprising a pronaos with 2 columns in antis, a naos and an opisthodomus with 2 columns in antis. The foundations lie only partially on the natural rock. The width of the foundation walls of the peristyle varies from 2.30 m. to 2.85 m. The crepis has 3 steps, of which the top 2 are of Pentelic marble. Due to the damaged surface of the stones, the curvature of the stylobate is no longer clearly discernable; it measures 0.030 m. on the east and west sides, 0.042 m. on the north side and 0.047 m. on the south side. The columns are built up of 7 drums. Their base diameter is 1.02 m. and that of the angle columns 1.03 m. They have only a slight entasis. Their total height is 5.71 m. and they have 20 flutes. The axial spacing is 2.58 m. and 2.41 m. at the corners. The curvature is repeated in the epistyle by means of an enlargement of the uppermost column drums. The triglyphs and unadorned metopes are of Pentelic marble and the carved metopes of island marble. Only the metopes on the east façade and the 4 adjoining the east end on both the north and south façades are decorated with relief carvings. The inner edifice is shifted slightly towards the west, so that the pronaos is deep and the opisthodomus shallow; the centre of the eastern antae stands in alignment with the third columns (the eastern pteron is 3.90 m. wide), and the western walls terminate in the centre of the second intercolumniation (the western pteron is 3.16 m. wide). The pronaos and opisthodomus are surmounted by continuous friezes: that above the former extending to the rear of the outer architrave, that above the latter only to above the antae. Both friezes are framed with Ionic profiled moldings. Opinions are divided as to the original interior structure of the naos (which was later radically altered): some archaeologists think that there were 3 x 5 columns, others (now in the majority) 4 x 7. The columns stood close to the wall and the architrave was surmounted by a second series of smaller columns. The order of the columns was probably Doric. The naos was covered with a flat wooden ceiling and the pteron with marble facing-slabs. The saddle roof was entirely faced with marble. The problem as to whether the temple was dedicated to Hephaistos or Theseus is as yet unsolved.

Date: 450/440. Dinsmoor specifies (on the basis of astronomy and its identification as an Hephaisteion) 17th Oct. 449/444 B.C.

Bibl. is very extensive; see in particular: W. B. DINSMOOR, Observations on the Hephaisteion, Hesp. Suppl. 5 (1941). H. KOCH, Studien zum Theseustempel in

Athen (Berlin, 1955). G. Ph. Stevens, Some Remarks upon the Interior of the Hephaisteion, Hesp. 19 (1950) p. 143-164.

26. ATHENS—ACROPOLIS (1961). View from the Philopappos. In the foreground, the Odeion of Herodes Atticus, to the right of this, the Stoa of Eumenes (Plate 68a) and above the Stoa, at the far right, the sanctuary of Asclepios. In the background, from right to left, the Propylaea (Plates 30-32) and in front of the Propylaea, the small Nike Temple (Plates 33-34), the Erechtheion (Plates 35-37) and the Parthenon (Plates 27-29).

27-28-29. ATHENS—PARTHENON (1960/1961). PLATE 27a: the east façade; PLATE 27b: the west and north façades; Plate 28a: view of the interior from the west; Plate 28b: detail of the northwest corner; Plate 29a: detail of the northwest angle of the opisthodomus; Plate 29b: detail of the opisthodomus from the south; Plate 29c: the northern pteron. The Parthenon is an octastyle peripteros (8 x 17) of 30.88 m. by 69.50 m., built on the south side of the Acropolis. Much unused building material from the older Parthenon was incorporated into the foundations. The steep and irregular slope of the rock made it necessary to enlarge the available surface with a terrace which, particularly on the south side, was made to rest on a deep foundation; in some places, several layers of the foundations rise above the level of the ground. The crepis has 3 steps and the stylobate has a curvature of 0.052 m. on the short sides and 0.108 m. on the long. The columns of the peristasis are 10.43 m. high with a base diameter of 1.90 m. and 1.94 m. at the angles. The interaxial measurements are 4.29 m. on both the short sides (3.68 m. at the angles) and the long ones (3.69 m. at the angles). The columns lean about 0.05 m. inwards and the angle columns 0.10 m. The problem of the metopes is solved by a subtle transition from broad metopes in the centre to narrower ones towards the angles; the result is that the triglyphs are not positioned precisely above the centre of the columns. All the metopes are adorned with representations in high relief. The inner structure comprises a pronaos, an opisthodomus and a naos divided into 2 separate chambers. Both the pronaos and opisthodomus are very shallow hexastyle prostyle porticos on 2 steps with short antae. The columns are surmounted by an architrave with regulae and guttae (on the walls of the naos, however, the regulae and guttae are replaced by a moulding); above the architrave, an Ionic frieze depicting the Panathenaea runs the length and breadth of the temple. A doorway 4.92 m. wide and 10 m. high led into the eastern chamber, the Hekatompedos neos, which measures 19.19 m. by 29.89 m. On either side of this stood 1 row of 9 Doric columns, linked together at the rear by one row of 5 columns. These were surmounted by an architrave supporting another 23 columns; there was no gallery. In this chamber stood the ca. 11 m. high statue of Athena Parthenos by Phidias. The western naos, which was originally called the Parthenon, is smaller: 19.19 m. by 13.37 m. In the centre stood 4 Ionic columns. It is not known what purpose this chamber served. The architects were Iktinos and Kallikrates.

Date: beginning of 447 B.C.; the temple was dedicated in 438 B.C. and the sculpture was completed in 432 B.C.

Bibl. No detailed recent study exists. N. M. Balanos, Les Monuments de l'Acropole, 2 vols. (Paris, 1938). M. Collignon & F. Boissonnas, Le Parthénon, l'histoire, l'architecture et la sculpture (Paris, 1926). G. Ph. Stevens, The Setting of the Periclean Parthenon, Hesp. Suppl. 3 (1940).

30-31-32. ATHENS—propylaea (1960-1961). PLATE 30a: the southern part; Plate 30b: the central passageway from the southwest; Plate 31a: the east façade; Plate 31b: detail of the entablature of the east façade; Plate 32a: the southernmost doorway in the central building; PLATE 32b: Ionic capital; PLATE 32c: detail of a column on the east façade. The Propylaea was built on the steep and rocky west side of the Acropolis, to replace the Propylon destroyed by the Persians in 480 B.C. However, the original plans were never carried to completion. The edifice now consists of a central passageway and 2 lateral wings. The central building comprises 2 Doric hexastyle porticos, a western and an eastern, linked by a spacious chamber. The western portico stands on a high platform of 4 steps, which is divided in the centre by the passageway. The columns are 8.80 m. high (8.82 m. in the centre, to obtain the desired curvature of the entablature; the stylobate has no curvature, since it is divided in 2); their base diameter is 1.56 m. and the interaxial measurements are 3.63 m., 3.43 m. in the centre and 3.38 m. at the angles; the columns have 20 flutes. In the adjoining chamber, 3 Ionic columns (10.29 m. high and 1.04 m. in diameter) stand on either side of the passageway to support the superstructure, which is 18.12 m. broad. The central chamber is closed off on the east side by a wall, 8.25 m. high, with 5 doorways leading to the eastern portico. The central doorway, through which the roadway passes, is the largest (4.13 m. wide and 7.38 m. high); in front of the other 4 doorways to the right and left of the passageway, there is a flight of 4 steps; the doorways on either side of the central passageway are 2.92 m. wide and those next to the lateral walls 1.47 m. The eastern

portico has a stylobate as its only substructure. The columns are 8.52 m. high (8.54 m. in the centre) and have a base diameter of 1.56 m. The northwest wing contains the so-called Pinacotheca, the only part of the lateral wings which was completed. It is in the form of a temple in antis and has 3 Doric columns in antis (height 5.85 m., base diameter 1.07 m. and interaxial measurement 2.50 m.). There is a window on either side of the door; there is no pediment. The southwest wing was never completed; it consists merely of 3 Doric columns in antis (as a counterpart for the northwest wing) and, behind these, a blind wall carried to the height of the westernmost column. The substructure is of Pentelic marble and Eleusinian stone. The architect was Mnesikles.

Date: 437/432 B.C.

Bibl. is very extensive. For a complete critical bibliography, see J. A. Bundgaar, *Mnesicles* (Kobenhavn, 1957).

33-34. ATHENS—TEMPLE OF NIKE (1961). PLATE 33a: the east façade; PLATE 33b: base of the southeastern angle column; Plate 34a: capital of the southeastern angle column; Plate 34b: view of the interior from the northeast corner. This small temple stands on a projecting bastion, the Nike Pyrgos, on the Acropolis, to the southwest of the Propylaea. It is a tetrastyle amphiprostyle of 5.40 m. by 8.17 m. built on a crepis of 3 steps. The columns are 4.05 m. high with a base diameter of 0.52 m.; the interaxial measurement is 1.59 m. The naos, which measures 4.14 m. by 3.78 m. (and is therefore broader than it is long), was closed off at the east end with bronze lattices, which linked the 2 columns between the antae. The architrave, carved in 3 fasciae, is very sober. It is surmounted by a continuous sculptured frieze. The temple is built of Pentelic marble. It was designed by Kallikrates in 448 B.C., but only built about twenty years later (probably between 427 and 424 B.C.). In the last years of the Vth century a parapet 1 m. high was erected around the north, west and south sides of the bastion and decorated with figures in relief.

Bibl. A. K. Orlandos, Zum Tempel der Athena Nike, Ath. Mitt. 40 (1915) p. 27-44. A. K. Orlandos, Nouvelles observations sur la construction du temple d'Athéna Nikè, BCH 71-72 (1947-1948) p. 1-38.

35-36-37. ATHENS—ERECHTHEION (1960, 1963). PLATE 35a: the east façade; PLATE 35b: the west façade; PLATE 36a: the north façade; PLATE 36b: detail of a column base in the north portico; PLATE 37a: detail of a capital and the entablature of the north portico; PLATE 37b: detail of the

entrance to the Prostomiaion. The Ionic temple is built on the north side of the Acropolis. Its groundplan is extremely complex, since several sacred spots had to be incorporated into the edifice. Here stood the wooden statue of Athena and the shrine of Erechtheus; to the north lay the tombs of Erechtheus, Kekrops and Pandrosos; the site included Athena's olive tree, the mark of Poseidon's trident and Poseidon's spring. Opinions differ as to the precise reconstruction and identification of the different parts. The eastern wing is a hexastyle prostyle (the columns are 6.59 m. high with a base diameter of 0.69 m.) without pronaos; the walls of the naos terminate at the antae and the columns are surmounted by an architrave adorned with 3 fasciae. This part of the temple was dedicated to Athena. On the north side, the entrance consists in a projecting portico with 6 columns (height 7.63 m., base diameter 0.82 m.), which stands 3.24 m. lower than the eastern portico. From this portico, a monumental doorway led to the Prostomiaion, while a small doorway on the west side led to the Pandroseion. The Prostomiaion was an oblong chamber on a north-south axis (unroofed according to some authors), from which a stairway at the southern end led to the porch of the Korai. To the east of the Prostomiaion, there were 1 or 2 more chambers, which had the same rear wall as the naos of Athena. Beneath the Prostomiaion was a crypt with the salt sea, which was connected underground with the spring under the north portico. The columns on the west side of the Prostomiaion were originally linked by bronze lattices; the wall and the windows date from the Roman period. The columns are 5.61 m. high. Below the second column from the south is another door leading to the Pandroseion. At the southwest corner of the temple stands the porch of the Korai, a projecting porch built on a crepis with 3 steps. This is surmounted by a podium, 1.77 m. high, on which stand the six caryatids (2.37 m. high). There was also a narrow entrance to the porch on the east side.

Date: is uncertain. Building probably began after the completion of the Parthenon (438 B.C.), but the major part was carried out after the peace of Nikias (421 B.C.), with interruptions, until 406 B.C. It is equally uncertain who the architect was, though some archaeologists think it may have been Mnesikles.

Bibl. J. M. Paton & G. Ph. Stevens, The Erechtheium, Text and Atlas (Cambridge, Mass., 1927). W. Dörpfeld & H. Schleif, Erechtheion (Berlin, 1942).

38a-b. SOUNION—TEMPLE OF POSEIDON (1961). PLATE 38a: the north and east façades; PLATE 38b: the northern peristasis and pronaos from the

southwest. The temple, a Doric hexastyle peripteros (6 x 13) of 13.47 m. by 31.12 m., is built at the southernmost tip of Attica. On the north and west sides, it stands on an artificial terrace with isodomic walls. The remains of the older poros temple destroyed by the Persians are incorporated in its foundations. The groundplan is regular: a naos (without inner columns), a pronaos and an opisthodomus, each of the latter with 2 columns in antis. The columns are 6.02 m. high with a base diameter of 1.04 m. (1.06 m. at the angles); they have 16 flutes. The interaxial measurements are 2.52 m. (2.37 m. at the angles). The inner structure bears a certain resemblance to that of the Hephaisteion at Athens: the architrave of the pronaos spanned both pteromata. At Sounion, however, the sculptured Ionic frieze above the inner architrave continued around the 3 other sides of the eastern porch (i.e. at the back of the outer architrave). Furthermore, the enclosed appearance of this eastern porch was accentuated by extending it to 2 intercolumniations. Above the pronaos and opisthodomus, an Ionic moulding took the place of the regulae. The temple was built of a local, white inoxydizable marble. The architect was probably the same man who had built the Hephaisteion.

Bibl. Β. Στάης, 'Ανασκαφαὶ έν Σουνίφ, 'Εφ. 'Αρχ. (1900) p. 114-150.

39a-b. RHAMNOUS—TEMENOS OF THEMIS AND NEMESIS (1961). PLATE 39a: general view from the east; in the foreground, the terrace wall, to the left, the Temple of Themis, to the right, that of Nemesis; Plate 39b: the southeast corner of the Temple of Nemesis, to the left, the Temple of Themis. The temenos lies on an artificial terrace of about 40 m. by 50 m. and now 3.15 m. high on the north side. The retaining wall is built of hammer-faced isodomic trapezoidal masonry with drafted edges. The southern temple, that of Themis, comprises a small naos (5.40 m. by 4.73 m.) and a pronaos with 2 columns in antis. Its walls are raised in Lesbian polygonal masonry. The Temple of Nemesis, built directly to the north of the latter, is a Doric hexastyle peripteros (6 x 12) of 9.99 m. by 21.42 m. The columns are 4.10 m. high with a base diameter of 0.71 m. (0.73 m. for the angle columns) and slant slightly inwards. The interaxial measurements are 1.90 m. and 1.73 m. at the angles. The temple was never completed: the lifting bosses were never removed and the flutes are merely outlined.

Date: a) Temple of Themis: earliest date, end of the VIth century, latest date, 487 B.C. b) Temple of Nemesis: between 436 and 430 B.C.

Bibl. Β. Στάης, 'Ανασκαφαὶ ἐν Ραμνοῦντι, Πρακτικὰ

(1890), p. 27-29. A. C. Orlandos, Note sur le sanctuaire de Némésis à Rhamnonte, BCH 48 (1924) p. 305-320.

40-41a. AKRAGAS—TEMPLE F (the so-called Temple of Concord) (1961). Plate 40a: the west façade; Plate 40b: the north and west façades; PLATE 41a: the entablature of the opisthodomus from the east. The so-called Temple of Concord stands on the rocky ridge at the southern edge of the town, about 700 m. west of Temple D. It is a Doric hexastyle peripteros (6 x 13) of 16.92 m. by 39.42 m., and is in many respects similar to Temple D. The columns are 6.70 m. high with a base diameter of 1.45 m. and have 20 flutes. The interaxial measurements are 3.19 m. on the short sides (with a double contraction at the angles: 3.10 m. and 3.00 m.) and 3.20 m. on the long (also with a double contraction at the angles: 3.11 m. and 3.01 m.). The problem of the metopes is solved by a system of 3 different measurements for the interaxial spacing and the widths of the metopes and the triglyphs. The inner structure, which is largely intact, comprises a pronaos with 2 columns in antis, 2 perfectly preserved stairways up to the roof located beside the entrance to the naos (which lies one step higher), a naos without inner columns and an opisthodomus with 2 columns in antis. On the entablature above the pronaos and opisthodomus, there were walls carried up to the roof, with openings in them to connect the attics. In 597 the temple was converted into a church: the partition between the naos and opisthodomus was demolished and the 2 long walls of the naos were transformed into arcades with 6 arches. It is not certain to whom the temple was dedicated, possibly to the Dioscuri? Date: ca. 430 B.C.

Bibl. Koldewey & Puchstein, p. 171-176.

41b. AKRAGAS—TEMPLE I (the so-called Temple of Castor and Pollux) (1961). In the middle of the Vth century a new temple, I, was built in the sanctuary of the chthonian divinities to replace the small cult edifices (Plate 3b). It was a Doric hexastyle peripteros (6 x 13) of 13.39 m. by 31 m. The anastylosis of the northwest corner of this temple was begun in 1826 and carried out in the most arbitrary manner. According to some archaeologists, the geison originates from the slightly larger Temple L, which was built beside Temple I during the Hellenistic period; according to others, Temple I was itself restored during the Hellenistic period and its geison renewed.

Bibl. Koldewey & Puchstein, p. 178-180.

42a-b. SEGESTA—TEMPLE (1961). PLATE 42a: the east façade; PLATE 42b: detail of the crepis on the

south side. The temple, which stands outside the town, consists merely of a peristasis with 6 x 14 columns (measuring 23.12 m. by 53.03 m.); no trace of an inner structure or its foundations has been found. Numerous elements of the temple remained unfinished: either because the non-Greek population intended it merely as an open air place of worship, or simply because the edifice was never completed. However, a number of aesthetic refinements went into the building of the peristasis: all the joints of the crepis are systematically disposed; there is a curvature in the stylobate: 0.04 m. on the short sides and 0.08 m. on the long; the columns, built up of 10 or 12 drums and still without flutes, are slender (9.37 m. high with a base diameter of 1.95 m.); the interaxial measurements are smaller on the short sides (4.33 m.) than on the long (4.36 m.); and there is a double contraction of the angle columns: 4.23 m. and 4.11 m. on the short sides and 4.22 m. and 4.10 m. on the long.

Date: between 430 and 416 B.C.

Bibl. Koldewey & Puchstein, p. 132-136.

43 a-b. ARGOS—HERAION (1961). PLATE 43a: the sanctuary from the south: in the foreground, the foundations of the later Heraion, in the background, the terrace wall of the earlier Heraion; PLATE 43b: the later Heraion from the terrace of the earlier. This important sanctuary which, besides the 2 temples, comprises stoas, a hypostyle chamber and a banquet hall, was excavated by American archaeologists in the years 1892-1895. The earlier Heraion is built on a terrace (56 m. by 34 m.) with a retaining wall of large, uncemented polygonal blocks on its south side. Nothing remains of the temple itself except a part of the stylobate 19.20 cm. long, 1.04 m. wide and 0.45 m. high. The only traces left by the wooden columns on the stylobate are 3 circles 0.80 m. in diameter; the interaxial measurement was 3.50 m. This temple, whose superstructure was entirely of wood, was the first peripteral temple (probably 6 x 14 columns) built in the Peloponnesos. It was burnt down in 423 B.C. and its reconstruction is extremely hypothetical.

The later Heraion, which was built to replace the earlier temple, is a Doric hexastyle peripteros (6 x 12) of 17.30 m. by 36.90 m. It stands on a lower terrace, the northern part of which was hewn out of the rock, while the southern part rested on a retaining wall, which ran parallel to the temple at about 20 m. distance. The foundations, measuring 20.10 m. by 39.60 m., consist of poros blocks 3.73 m. broad; the inner walls and inner columns have separate foundations. The columns of the pteron were 7.38 m. high and had a base diameter of 1.32 m. (1.34 m. for the

angle columns); the interaxial measurements were 3.26 m. (3.04 m. at the angles). The entablature was 2.41 m. high. The inner structure consisted of a pronaos and an opisthodomus, each with 2 columns in antis, and a naos divided into 3 aisles by 2 rows of 5 Doric columns; the latter supported architraves surmounted by a total of 10 smaller columns. The temple was built of poros and faced with stucco; marble was used for the roof tiles and all the sculptured elements. The pediments and the metopes on the short façades were richly sculptured. The architect was Eupolemos of Argos.

Date: The earlier Heraion: first half VIIth century B.C.; the later Heraion ca 420/410-400 B.C.

Bibl. Ch. Waldstein, The Argive Heraeum (Boston, 1902) pp. 110-126. J. I. Caskey & P. Amandry, Investigations at the Heraion of Argos, Hesp. 21 (1952) p. 165-221. P. Amandry, Observations sur les monuments de l'Héraion d'Argos, ibid., p. 222-274.

44a. LAIMOS—TEMPLE OF APOLLO ZOSTERIOS (1961). View of the temple from the east. The ruins of this small Temple of Apollo, excavated by Kourouniotis in 1926/1927, lie on the narrow isthmus that joins Cape Zostir to the mainland. Measuring 6.00 m. by 10.80 m., the temple consists merely of a naos which faces east. The naos contains a marble throne against the south wall, a marble table and 3 marble benches in the middle. It is surrounded by unfluted columns (4 x 6; 6 according to the excavation report, but at present there are 7 on the south side!), with a base diameter of 0.46 m.; these stand on isolated square bases. A large altar (4.25 m. by 2.55 m.) stands 6.75 m. east of the entrance.

Date: the oldest remains date from the end of the VIth century B.C. (the wall socle); extensive alterations were carried out in the second half of the IVth century B.C. (addition of columns and marble furniture).

Bibl. Κ. Κουρουνιώτη, Τὸ ιέρὸν τοῦ ᾿Απόλλωνος τοῦ Ζωστῆρος, Δελτ. 11 (1927/1928) pp. 9-53.

44b. AULIS—TEMPLE OF ARTEMIS AULIDEIA (1960). View from the west. Excavations carried out by Greek archaeologists since 1956, to the southwest of Mikro Vathy, have brought to light, i.a., a temple with an elongated groundplan (9 m. by 30 m.), comprising a prostoon, a naos and an adytum. In the Vth century B.C., the prostoon had 2 columns in antis; in the Hellenistic period, a portico with 4 Doric columns was added onto the front. The naos has 2 rows of 4 inner columns and contains a small altar between the 2 columns at the rear and 2 pedestals for statues beside the entrance to the adytum. The temple

dates from the Vth century B.C. and was restored in the Hellenistic period and in Roman times; at the close of antiquity, a small bathing establishment was built over the southeast part of it.

Bibl. Ι. Θρεψίαδης, 'Ανασκαφαλ 'Αυλίδος, Τὸ "Εργον 1958 ('Αθῆναι, 1959), p. 53-57; ibid 1959 ('Αθῆναι, 1960), p. 24-26. Πρακτικά (1956), p. 94-104; ibid (1959) p. 26-33.

45. DELPHI—SANCTUARY OF APOLLO (1960). General view from the Phlemboukhos. Below, to the right of the modern roadway, the entrance to the sanctuary and the beginning of the Sacred Way, with treasuries and ex-votos on either side of it; at the first bend, the reconstructed Athenian treasury; to the right of this and a little higher up, the polygonal wall and the Athenian stoa; above those, the Temple of Apollo; still higher up, the theatre (Plates 80-81a); at the very top, the stadium (Plate 93a, c).

46-47a. DELPHI—THOLOS OF THE SANCTUARY of Athena pronaia (1961). Plate 46a: view from the northeast; PLATE 46b: detail of the entablature; PLATE 47a: detail of the crepis with a column and wall of the naos. The Tholos was excavated by the Ecole française d'Athènes between the Massalian treasury and a small limestone temple. The foundations consist of 6 layers of large poros blocks of a total height of 2.13 m.; the euthynteria (0.29 m. high) lies on top of the sixth layer. The crepis has 3 steps. Each step numbers 40 blocks, the joins of which all fall over the centre of an underlying block. The blocks in any one step differ a maximum of 2 mm. in size. The radius of the stylobate is 6.75 m. The peristyle is paved with 40 marble facing slabs, which correspond to the 40 blocks of the stylobate; it slopes 0.009 m. outwards (for drainage purposes), but this slope necessitates a compensating inclination of the columns. The pteron consists of 20 Doric columns; each has 20 flutes and is built up of 4 drums of equal height. They are 4.81 m. high with a base diameter of 0.81 m. (Those responsible for the anastylosis raised columns of 5 drums). The columns support 20 architrave blocks (0.59 m. high), surmounted by blocks constituting the frieze of metopes. The foundations of the walls of the naos likewise consist of 3 layers, which correspond to the 3 steps of the crepis. The third layer, the toichobate, built of dark Eleusinian limestone, rises 0.55 m. above the floor of the peristyle. On the toichobate stand 18 orthostates, 0.88 m. high, the bases adorned with a Lesbian cymatium. The doorsill (0.38 m. high) consists of a single marble block, straight on the inside and curved on the outside (the curve is 3.33 m. long); the door opening is 2.18 m. wide and 3.80 m. high. The floor of the naos, consisting of white marble and grey limestone slabs, rests on 2 layers of poros blocks. A socle of Eleusinian limestone (0.59 m. high and 1.17 m. wide) is built around the naos against the orthostates. 10 columns (4.60 m. high) with 17 Ionic flutes and Corinthian capitals stood against the walls. To whom the temple was dedicated or what purpose it served is still unknown. It was probably built by the Ionian architect Theodorus of Phokaia, who also wrote a treatise on it, which has since been lost.

Date: according to some scholars, last quarter of the Vth century B.C., according to others, beginning of the IVth century B.C.

Bibl. J. CHARBONNEAUX et K. GOTTLOB, Fouilles de Delphes, Le sanctuaire d'Athéna Pronaia, La Tholos (texte et planches) (Paris, 1925).

47b-48. DELPHI—TEMPLE OF APOLLO (1961). PLATE 47b: the southwest corner; Plate 48a: view from the northwest; Plate 48b: the foundations of the naos. The temple was excavated by the Ecole française d'Athènes in the years 1893 and 1894; test-trenches were made in 1913, 1948 and 1949 and the partial anastylosis dates from 1939 to 1941 and 1949. It is a Doric hexastyle peripteros (6 x 15) of 21.68 m. by 58.18 m., comprising a pronaos, naos and opisthodomus, and built on the same groundplan as its archaic predecessor, the so-called Temple of the Alcmaeonidae of the VIth century B.C. It stands on an artificial terrace about 60 m. long and 5 to 5.70 m. high has a northeast-southwest axis. The crepis, built of local limestone, has 3 steps (of an average height of 0.42 m.). An incline 6.44 m. long at the base affords access to the northeast side of the temple. The columns, built of poros and faced with stucco, are \pm 10.59 m. high with a base diameter of 1.80 m.; they have 20 flutes, but neither entasis nor inclination. The interaxial measurements are 4.13 m. on the short sides (3.71 m. at the angles) and 4.08 m. on the long (3.65 m. at the angles). What little remains of the superstructure is in a state of ruin. The inner structure, measuring 13.34 m. by 44.14 m., is not adjusted to the peristyle. The pronaos, which is 6.83 m. deep, and the opisthodomus, which is 5.54 m. deep, are both 10.53 m. wide and each has 2 columns in antis (about 10.40 m. high with a base diameter of 1.54 m.). The walls stand on a toichobate bordered by a cymatium; the toichobate is surmounted by a layer of stones lying lengthwise and a row of orthostates. The naos measures 10.73 m. by 25.35 m. and is divided into 3 aisles by 2 rows of columns (maximum diameter 1.20 m.) with Ionic capitals: 8 on the north side and 6 on the south side. Against the south wall, between the fifth and the eighth column, stood a small structure (inner

width 2.90 m.) containing a bench for the consultants, a cult image of Apollo, the omphalos, the tomb of Dionysos and the stairway to the subterranean adytum. Pausanias mentions a certain Spintharos of Corinth as the architect.

Date: the archaic temple collapsed shortly before 371 B.C.; the new temple was begun in 369 B.C. and finished towards 330/320 B.C.

Bibl. M. F. Courby, Fouilles de Delphes, La terrace du temple, premier fasc. (Paris, 1915). P. Amandry, L. Lerat, J. Pouilloux, Chronique des fouilles en 1949, BCH 74 (1950) p. 316-321.

49a-b. TEGEA — TEMPLE OF ATHENA ALEA (1959). Plate 49a: the northeast corner from the west; Plate 49b: the east façade. The temple was excavated by the Ecole française d'Athènes in the years 1900-1902 and 1909-1910. It is a Doric hexastyle peripteros (6 x 16) of 19.16 m by 47.52 m. The groundplan is regular: a pronaos with 2 columns in antis; a naos with 14 half-columns with Corinthian capitals and a second entrance in the middle of the northern wall; an opisthodomus with 2 columns in antis. Two inclines, one at the east façade and one at the north façade, give access to the temple—the use of the northern incline remains hypothetical. The columns are built up of drums, their total height is 9.47 m., their base diameter 1.55 m., they have 20 flutes and a slight entasis. The problem of the metopes is solved by a combination of the contraction of the angle columns and a widening of the angle metopes and triglyphs. The interaxial measurements on the short sides are 3.58 m.—at the angles 3.32 m. —on the long sides also 3.58 m. and 3.24 m. at the angles. The total height of the tempel (without acroteria) is 15.68 m. The temple was built of marble. The architect was Scopas of Paros (Pausanias, VIII, 45,4).

Date: ca. 350 B.C., a terminus post quem is the fire of an elder temple in 395 B.C., or even perhaps the peace of Antalcidas in 386 B.C.

Bibl. Ch. Dugas & J. Berchmans & M. Clemmensen, Le sanctuaire d'Aléa Athéna à Tégée au IVe siècle (Paris, 1924) Texte & Atlas.

50a-b. NEMEA—TEMPLE OF ZEUS (1964). PLATE 50a: view from the southwest; PLATE 50b: view from the west. Located in the small plain of Nemea, the Temple of Zeus is a Doric hexastyle peripteros (6 x 12) of 20.09 m. by 42.55 m. with a pronaos, a naos and an adytum. The crepis is built along an east west axis and has 3 steps; an incline at the east end gives access to the temple. The columns of the peristyle (one of which is still standing) are 10.36 m. high with a base diameter of 1.63 m. (that of the angle columns is 1.65 m.); the interaxial measurements are 3.75 m. on the short sides (3.45 m. at the angles) and 3.74 m. on the long

(3.45 m. at the angles). The columns on the short sides stand vertically, those on the long sides have a slight inward slant. The entablature is 2.56 m. high on the short sides and 2.48 m. on the long. The walls of the inner structure, which are raised on a socle of orthostates, are 0.92 m. thick. Of the pronaos, there remain the 2 columns in antis. The naos (9.35 m. by 15.77 m.) was lined on 3 sides with Corinthian columns (6 x 4) surmounted by a row of smaller Ionic columns. The adytum, 1.98 m. deep and measuring 3.62 m. by 4.05 m., was at the rear. A stairway of 5 narrow and uneven steps gave access to it. The purpose of this structure is doubtful. The temple was built of limestone and faced with a thin layer of stucco. Some archaeologists attribute it to Scopas of Paros and the company of builders of Tegea; rather it is a less successful and frequently clumsy imitation of Scopas' work.

Date: ca. 340 B.C. (built over an archaic temple).

Bibl. M. CLEMMENSEN & R. VALOIS, Le temple de Zeus Némée, BCH 49 (1925) p. 1-20.

51a-b. DIDYMA—TEMPLE OF APOLLO (Photographs German Archaeological Institute in Berlin). PLATE 51a: the northeast façade; PLATE 51b: view of the interior from the southwest showing the stairway to the Chresmographion. The Sanctuary of Apollo, which is connected to Miletus by a sacred way, was excavated partly by the French, in 1895, and partly by the Germans, from 1906-1913 and 1924-1938. Little is known of the first temple, which was begun in about 540 B.C.; it consisted in an open court, in which stood a small naiskos with the bronze image of Apollo. This shrine was a mixture of Doric and Ionic elements. The sanctuary was destroyed by the Persians in 494 B.C. and the image of Apollo carried off to Ecbatana. It was only after the liberation of Miletus by Alexander in 331 B.C. and the restitution of the image of Apollo by Seleucus I in 300 B.C. that the Greeks began to build a new temple. It is a dipteros (10 x 21) measuring 51.13 m. by 109.34 m. and 60.13 m. by 118.34 m. at the base of the crepis. The foundations consist of evenly hewn blocks of local limestone. The crepis has 7 steps and is 3.15 m. high. A curvature is clearly visible throughout the substructure. A monumental flight of 14 steps gives access to the temple on the northeast side. The slender Ionic columns of the peristyle have 24 flutes and are 19.70 m. high with a base diameter of 2.02 m. (with certain variations of 1.95 m. to 2.05 m.); the interaxial measurements are 5.30 m. on the short sides and 5.29 m. on the long. The column bases, which are varied and richly decorated, consist of a square plinth (2.69 m. long and 0.45 m. high), a 0.43 m. high trochilus and a torus which forms the transition to the shaft; their total height is 1.23 m. The 8 bases in the middle of the northeast side are different, and adorned with eclectically chosen motifs. The capitals are also carved with a variety of motifs: instead of the usual tectonic elements, protomas of gryphons and bulls and busts of deities figure amidst diverse plant motifs. The architrave is surmounted by a frieze, 1.48 m. high, adorned with acanthus leaves and Medusa heads. The inner structure differs from the classic type of temple. There is a deep pronaos on the east side, containing 12 columns. From the pronaos, 2 narrow doors (1.12 m. by 2.25 m.) open into 2 vaulted tunnels (15.06 m. long), which descended with a steep drop (3.10 m.), under 2 staircases, to 2 small chambers (1.74 m. by 4.88 m.) through which one finally reached the adytum. The adytum is a large open court (22.33 m. by 53.94 m.) lined on the north, west and south sides with pilasters (\pm 1.79 m. wide, 18.36 m. high, with a projection of \pm 0.87 m.), whose axes correspond to the axes of the intercolumniations of the peristyle. On the west side of the adytum, which was planted with bay trees, stood the naiskos, a tetrastyle prostyle structure (8.59 m. by 14.53 m.), whose 4 Ionic columns were 7.47 m. high and 0.83 m. in diameter. From the east side of the adytum, a monumental stairway, 15.24 m. wide and with 22 steps, ascends to the Chresmographion, situated 5.37 m. higher up. Three doorways separated by Corinthian half-columns give access to this chamber (14.04 m. by 8.73 m.), in the centre of which rise 2 Corinthian columns. In the east wall of the Chresmographion is a large doorway (5.63 m. wide and 14.07 m. high) situated 1.46 m. above the floor of the pronaos, so that any access through it was impossible. It was doubtless here that the oracles were proclaimed. On the north and south sides of the Chresmographion were doors opening onto staircases (of 68 steps each) to the roof. The temple was designed by Paeonius of Ephesus and a local architect, Daphnis.

Date: begun at the beginning of the IIIrd century B.C., the temple was still being added to in the IInd century A.D., but was never completed. Bibl. H. KNACKFUSS, Didyma, Erster Teil: Die Baubeschreibung, 3 Bd. (Berlin, 1941).

52-53. LINDOS — SANCTUARY OF ATHENA LINDIA (1960). PLATE 52a: the stoa from the west; PLATE 52b: the stoa and, behind it, the steps of the propylaea; PLATE 53a: the northwestern wing of the stoa: the geison of the rear wall; PLATE 53b: the northwest façade of the Temple of Athena. The acropolis of Lindos was excavated by Danish archaeologists from 1902 to 1905 and restored by the Italians, albeit rather carelessly, prior to and largely also during World War II. The sanctuary

is built on an isolated rock 115 m. high and covers a total surface area of \pm 8400 m.² It comprises the Temple of Athena Lindia, the propylaea with an altar court and a stoa. The temple is a Doric tetrastyle amphiprostyle edifice (2 x 4) of 7.75 m. by 21.65 m., with a pronaos, naos and opisthodomus. It is founded on the bare rock, which was filled in here and there with poros blocks. Three steps on the northeast side and 4 steps on the southwest side give access to the temple. The columns are 5.50 m. high with a base diameter of 0.87 m.; the interaxial measurements are 2.35 m. in the middle and 2.19 m. at the angles. The epistyle is 0.62 m. high and adorned with a frieze of metopes and triglyphs. The pronaos and opisthodomus are both 4.95 m. deep and the naos measures 6.19 m. by 10.37 m.

Date: second half of the IVth century B.C. (345/330 according to E. Dyggve); built to replace an archaic temple of the VIth century.

The propylaea comprises a 21 m. wide flight of 17 steps up to the entrance and 2 small symmetrical avantcorps in the form of Doric prostyle temples, which are joined together in front by 10 Doric columns and at the rear by a wall with 5 doorways opening onto the altar court. The whole was excavated in an advanced state of ruin. The propylaea dates from ca. 300 B.C.; in about A.D. 200, an Ionic portico was built around the altar court.

The stoa consists of 2 projecting wings joined together by a single row of Doric columns. Both wings are 7.44 m. wide, have 4 Doric columns across their façades and 4 more columns along their inner sides and project 10.48 m. forwards. The portico linking the 2 wings together is 70.74 m. long and has 28 Doric columns (height 5 m., base diameter 0.78 m.).

Date: end of the IIIrd century B.C.

Bibl. E. DYGGVE, Lindos, Fouilles de l'Acropole 1902-1914 et 1952. III Le sanctuaire d'Athana Lindia et l'architecture lindienne (Berlin & Copenhague, 1960).

54a. SAMOTHRACE—HIERON (1958). View from the north. Excavations were carried out first by the Austrians (1873/75) and then, since 1938, by American archaeologists; the anastylosis dates from 1956. The Hieron, a long narrow building (40 m. by 13 m.) facing north and south, stands on the south side of the sanctuary of the Great Gods. The southern part is built on a terrace with a retaining wall. The limestone foundations and marble euthynteria (with curvature) are well preserved. On the north façade, there is a portico with 2 rows of 6 Doric columns, joined together by a single column on either short side. The naos 11.30 m. by 28.70 m.) was apsidal at the south end; both long sides were lined with benches and the eschara stood in the centre. The walls were faced with stucco and painted red, black and white, in the manner of the first decorative style at Pompei. Two steps ran around the apse. The entire building was surmounted by a Doric entablature. The building was used for the initiation into the higher degree of the mysteries, the Epoptaea.

Date: begun about 325/300 B.C.; the columned portico was added in about 150 B.C.; various repairs were undertaken in Roman times and a complete restoration in the Illrd century A.D.

Bibl. K. Lehmann, Samothrace: Third Preliminary Report, Hesp. 19 (1950) p. 1-20; Samothrace: Fourth Preliminary Report, Hesp. 20 (1951) p. 19-28.

54b. RHODES—TEMPLE OF APOLLO (1960). View from the west. On the acropolis, directly to the west of the theatre and the stadium, are the remains of a Doric temple, of which 3 angle columns with the entablature and part of a fourth column were re-erected by the Italians. Both the excavations of 1927/1929 and the anastylosis are scientifically indefensible and were indeed never published.

54c. PERGAMON—IONIC TEMPLE (1960). View from the south. Situated on the acropolis, this Ionic temple was excavated by the German Pergamon expedition on the north side of the long theatre terrace. It is built on a 4.50 m. high podium and connected to the theatre terrace by a 13.90 m. wide monumental marble stairway with 25 steps. The podium, which measures 18.50 m. by 27 m., is largely hewn out of the rock; only the southwest corner is artificially raised against a retaining wall 4 m. high. The foundations of the temple consist for the most part of the solid rock and of blocks of trachyte on the southwest side. The crepis has 3 steps and the stylobate, with curvature, measures 11.80 m. by 20.22 m. A projecting portico with 6 Ionic columns (4 x 2), 10.14 m. high with a base diameter of 1.11 m., constitutes the entrance; the columns have 24 flutes and their entasis is slight. The intercolumniations are closed with marble slabs. A door 3.50 m. wide, set in a wide, decorated frame, opened into the naos (9.26 m. by 10.79 m.). The base of the walls, which is 0.94 m. thick, is bordered with a very elaborate continuous moulding and surmounted by orthostates 10.04 m. high. The 4 exterior angles are adorned with pilasters, 1.13 m. wide with a projection of 0.04 m. A socle 0.90 m. high, 0.80 m. wide on the long sides and 0.90 m. wide at the rear end lines the west, north and east walls of the naos. In the centre of the north side, the socle widens out to form a podium (3.38 m. long and 1.15 m. deep), on which stood a naiskos supported by 2 columns and 2 pilasters. Both the east and west walls were adorned with 6 pilasters. It is uncertain to whom the temple was dedicated (temple of Dionysos? the Attaleion?).

Date: built in the first half of the second century B.C., the temple was destroyed by fire at an unknown date and rebuilt by Caracalla.

Bibl. R. Bohn, Die Theater-Terrasse, Altertümer von Pergamon IV Text & Atlas (Berlin, 1906) p. 41-70.

55-56a. BRAURON—SANCTUARY OF ARTEMIS (1962). Plate 55a: view of the northern stoa; PLATE 55b: view of the northern stoa and chambers from the southeast; Plate 56a: view of the northern stoa and chambers from the east. Excavations were carried out by I. Papadimitriou form 1948 until 1963. The sanctuary comprises a Doric prostyle temple of Artemis (10.35 m. by 19.90 m.); a few chambers partially hewn out of the rock (a small sanctuary, the so-called tomb of Iphigenia and the sacred house); an open square (24 m. by 27 m.) surrounded by a U-shaped Doric stoa with 33 columns opening on the south; a propylon on the west side and, on the north and west sides, 9 chambers (6 m. by 6 m.) for the Arktoi (each chamber having a stone table surrounded by 12 klinai). Numerous stelae with inscriptions and pedestals with votive offerings stood in the \pm 90 m. long stoa. A narrow passageway in the centre of the north side led to a sort of elongated vestibule with a gateway at either end.

Date: the temple dates from the first half of the Vth century B.C. and the stoa from the last quarter of the Vth century B.C.

Βibl. Only short provisional reports: Α. Κ. 'Ορλάνδος, Τὸ "Εργον 1955 ('Αθῆναι, 1956) p. 33-34; ibid 1956 ('Αθῆναι, 1957) p. 25-31; ibid. 1957 ('Αθῆναι, 1958) p. 20-24; ibid. 1958 ('Αθῆναι, 1959) p. 30-39; ibid. 1959 ('Αθῆναι, 1960) p. 13-20; ibid. 1960 ('Αθῆναι, 1961) p. 21-30; ibid. 1961 ('Αθῆναι, 1962) p. 20-37; ibid. 1962 ('Αθῆναι, 1963) p. 25-39. Ι. Παπαδημητρίου, 'Ανασκαφαὶ ἐν Βραυρῶνι τῆς 'Αττικῆς, Πρακτικὰ (1949) p. 75-90; Πρακτικὰ (1950) p. 173-187; Πρακτικὰ (1955) p. 118-120.

56b. ELEUSIS—TELESTERION (1960). View of the west side from the south. The Sanctuary of Demeter is situated against the southeast flank of an isolated rock in the Thriasian plain, about 20 km. west of Athens. The excavations, carried out by Greek archaeologists, were begun in 1882 and, with longer or shorter interruptions, are still in progress today. The greater part of the sanctuary, which was constantly built and rebuilt over a period of almost 2000 years, has now been uncovered. The central edifice, the sanctuary of the mysteries, was the Telesterion, in whose architectural history it is possible to distinguish 6 main stages.

1) A Mycenaean "megaron B" with an unusual podium (3.40 m. wide) flanked by 2 stairways in front of the entrance. The megaron was surroun-

ded by a peribolos 0.85 m. thick. Date: LH II. (1). A small apsidal, elliptical or round temple with a superstructure of perishable materials was probably built during the geometric period; it has now as good as totally disappeared (2).

- 2) The early-Archaic temple, or Solonic Telesterion, was the first monumental temple, built on a Lesbian polygonal wall socle of Eleusinian stone with a superstructure of mud bricks. In an east-westerly direction, it measured \pm 14 m. and in a north-southerly direction \pm 24 m. The position of the doors and the inner structure can no longer be accurately determined; it is generally presumed that the anaktoron was built against the southwest wall at the rear (3).
- 3) The Pisistratid Telesterion was built on a square groundplan, along an east west axis, and had a prostoon on the east side, 2 columns deep and with 9 or 10 Doric columns across its façade (4.55 m. by 27.15 m.). Three doors (1.30 m. wide) opened into the naos, in which stood 22 Ionic columns (base diameter 1.31 m.). The anaktoron was located in the southwest corner. There were 9 stairways (0.27 m. high and 0.30 m. wide) along the south, west and north walls. The edifice was raised in about 525 B.C. and destroyed by the Persians in 480/479 B.C. (4).
- 4) The Cimonian Telesterion. After the defeat of the Persians, Cimon undertook the rebuilding of the sanctuary between 479 and 461 B.C. The work was never completed and the remains are few. The foundations of the north and south sides and of the prostoon were retained, but the edifice was enlarged 17.50 m. towards the west, where a large section of the rock was hewn away. The anaktoron remained in its original place, but it was now in a symmetrical position in the centre of the south wall. The prostoon was incorporated into the naos (which now measured 27 m. by 50 m.) with 3 rows of 7 columns.
- 5) The Periclean Telesterion was built in 2 stages: a first design by Ictinus was only partially executed and later discarded in favour of a second design by Koroibos, Metagenes and Xenokles, which was completed. This was a square building (51.20 m. north/south by 51.55 m. east/west), the west side of which was largely hewn out of the rock (Plate 56b). The naos contained 6 rows of 7 columns and the anaktoron (5.60 m. by 14.20 m.) occupied the centre. 8 wide stairways were built around the outside of the naos and 6 doors (± 2.90 m. wide), 2 on each side with the exception of the west side, opened into it. There was no prostoon.

Date: third quarter of the Vth century B.C. (5). 6) In the IVth century B.C., Philo's porch was added in front of the east façade: a stylobate measuring 11.35 m. by 54.50 m., 10 Doric columns (height ± 15.50 m., base diameter 1.97 m.)

across the façade and 2 intercolumniations on the sides.

Date: last quarter of the IVth century B.C. 7) During the time of the Roman emperors, and especially during the reign of Marcus Aurelius, extensive restoration work was carried out.

Bibl. is extremely copious. For an excellent recent summary see: G. MYLONAS, Eleusis and the Eleusinian Mysteries (Princeton, 1961). Still of importance is F. NOACK, Eleusis, die baugeschichtliche Entwicklung des Heiligtums (Berlin, 1927).

- (1) K. KOUROUNIOTIS, Arch. Rel. Wis. 32 (1935) p. 52.
- (2) Κ. Κουκουνίστικ, Δελτ. 13 (1930-31) p. 24.
 (3) Κ. Κουκουνίστικ, Δελτ. 14 (1931-32) p. 7
- (3) Κ. ΚΟUROUNIOTIS, Δελτ. 14 (1931-32) p. 7. F. ΝΟΑCK, *op. cit.* p. 16. (4) F. ΝΟΑCK, *op. cit.* p. 48. (5) F. ΝΟΑCK *op. cit.* p. 139.
- 57a. DAPHNI—SANCTUARY OF APHRODITE (1960). View of the votive niches from the south. This rustic sanctuary, which was excavated by Greek archaeologists, is situated directly to the north of the Sacred Way from Athens to Eleusis, at about 13 km. from Athens. It comprises a 0.80 m. thick peribolos built of dry rubble; on the south side, a simple propylon; on the west side, a small temple in antis built up against the peribolos; against the southern part of the peribolos, an enclosed court with a 3columned portico on the west side of it; on the north side, numerous votive niches hewn out of the rock and covered with inscriptions of the IVth century B.C. Between the sanctuary and the Sacred Way, the archaeologists have found the remains of living quarters for priests or guests. Date: end of the Vth/IVth century B.C.

Bibl. Ι. Τραυλός, 'Ανασκαφαὶ 'Ιερᾶς 'Οδοῦ, Πρακτικὰ (1938), p. 25-33. Κ. Κουρουνιώτη καὶ Ι. Τραυλός, 'Ανασκαφαὶ 'Ιερᾶς 'Οδοῦ, Πρακτικὰ (1940) p. 39-41.

57b-58. OROPOS—AMPHIAREION (1961).PLATE 57b: the Temple of Amphiaraus from the southwest; Plate 58a: the stoa from the west; PLATE 58b: the stoa: detail of the klinai. The sanctuary of the mythical hero Amphiaraus, situated in a thickly wooded valley at Oropos, was excavated in 1884 and following years. It comprises a theatre (cf. Plate 76a-b), a temple with a monumental altar, a stoa and, on the south bank of the rhevma, hotels and living quarters for the pilgrims. The southern half of the temple was washed away by the rheyma. The edifice has a curious groundplan: it consists of a pronaos with 6 Doric columns between the antae, a naos and, at the rear of the naos, a small portico with 2 columns which served as a second entrance (the whole measured 14.24 m. by \pm 31 m.). The outer walls consisted of a socle (0.69 m. thick) of carefully dressed rectangular limestone blocks and above this rubble

masonry. The naos, which is 12.87 m. wide and 21.66 m. long, is divided into 3 aisles by 2 rows of 5 Ionic columns; the columns are unfluted and have a base diameter of 0.59 m. A door, 1.44 m. wide, in the centre of the rear wall of the naos leads to a small portico (2.58 m. deep and 3.91 m. wide) with 2 Doric columns; these two are also unfluted and have a base diameter of 0.41 m. A few elements of the superstructure were preserved: the 0.54 m. high epistyle and the 0.60 m. high frieze with 0.39 m. wide triglyphs and 0.59 m. wide metopes.

Date: first quarter of the IVth century B.C. with alterations of a later date.

The stoa stands about 75 m. to the northeast of the temple. It is an elongated structure (± 11 m. wide and \pm 110 m. long), consisting of two lateral chambers (11 m. by 7.50 m.) linked together by a central hall. 44 Doric columns with 20 flutes (height 3.90 m., base diameter 0.65 m., interaxial measurement 2.28 m.) rose in front of the open south façade of the central hall, while pilasters adorned the southern walls of the lateral chambers, which could be reached through the central hall. The latter was divided into 2 aisles by a row of 17 Ionic columns and lined with benches, the klinai, supported on marble pedestals. The height of the pedestals, 53 of which remain, is 0.28 m. and the width of the benches 0.45 m. Fragments of the superstructure still exist: the 0.43 m. high epistyle and the 0.48 m. high frieze with 0.31 m. wide triglyphs and 0.44 m. wide metopes. All the visible elements of the edifice were faced with stucco and polychromed.

Date: first quarter of the IVth century B.C.

Bibl. W. DÖRPFELD, Περί τῶν ἐν ἀμφιαρείω οἰκοδομημάτων, Πρακτικὰ (1884), p. 88-92. B. I. Λεονάρδος ἀμφιαρείου ἀνασκαφαὶ, Πρακτικὰ (1886), p. 51-56; ibid (1887), p. 59-63; ibid (1903), p. 33-35; ibid (1904), p. 27-28; ibid (1906), p. 83-85. F. Versace, Tempel und Stoa im Amphiaraeion, Ath. Mitt. 33 (1908) p. 247-272.

59a-b. EPIDAUROS—SANCTUARY OF ASKLEPIOS (1961). PLATE 59a: the Enkoimeterion to the north of the Tholos, seen from the west; PLATE 59b: the labyrinth of the Tholos from the east. The sanctuary was excavated mainly by Greek archaeologists from 1881 to 1928 and from 1948 to 1951. The Enkoimeterion, or Abaton, is a two-aisled stoa (70 m. long and 9.50 m. deep), which closes off the sanctuary on the north side. 29 Ionic columns stood along the façade and 13 inside. Due to a difference in the level of the ground, the lower lying western part of the edifice also had a lower storey, with 13 Doric columns across the façade and 6 columns inside. A stairway of 18 steps descended to the lower lying part. The Tholos,

which is entered in the building accounts as the Thymela, stands to the south of the stoa. The stylobate measures 21.82 m. in diameter and an incline on the east side gives access to the edifice, which had 26 Doric columns outside and 14 Corinthian columns inside. Under the naos is a labyrinth consisting of 3 concentrical walls, provided with doors, but also linked together by cross-walls, in such a way that one is obliged to walk almost a full circle to get from one to the other. Its purpose is still unknown. The edifice was richly decorated with ornamental sculpture. The architect was Polycleitus the Younger. Date: 360/320 B.C.

Bibl. Π. Καββαδίας, Τὸ ιέρὸν τοῦ ᾿Ασκληπίου ἐν Ἐπιδαύρω (᾿Αθῆναι, 1900); also in Πρακτικὰ (1882) p. 77-83; ibid (1883) p. 49-50; ibid (1884) p. 54-58; ibid (1899) p. 103-105; ibid (1905) p. 43-89; ibid (1907) p. 183-185. G. Roux, L'architecture de l'Argolide aux IVe et IIIe siècles avant J.C. (Paris, 1961) p. 131-200.

60a. DELOS—SERAPEION A (Photograph Ecole française d'Athènes). View from the south: in the background, the entrance, on the left, the assembly hall, on the right, the courtyard and the stairway of the temple, in the foreground, the remains of the portico. The Serapeion A was excavated by the Ecole française in the district of the Inopos. The original entrance was on the street, to the north of the sanctuary, whence a stairway of 12 steps led up to a trapezoidal courtyard (maximum width 6 m., maximum length 12 m.). The eastern section of this courtyard is occupied by a small and extremely simple temple (3.20 m. by 4.10 m.), consisting merely of four walls. It stands a little above the level of the courtyard and a few steps lead up to it. Under the temple is a cellar (1.10 m. by 2.30 m. and 1.65 m. high), with 5 steps descending to it from the naos; a basin with a waterpipe leading into it stands on the east side of the cellar. Directly opposite the entrance to the temple lie the remains of the altar. The northeastern part of the sanctuary is occupied by a hall, with an entrance on the west side, which is also on a higher level than the courtyard. The wall dividing it from the courtyard is 1.50 m. high and was surmounted by small columns which supported the roof. Several niches in the north wall remain intact. The northwest side is taken up by an irregular trapezoidal chamber with 2 doors (in the south and east walls). The north and west walls and part of the south and east walls are lined with marble benches. The south side is bounded by a portico. When, at a later date, a water-pipe was laid through the southeast corner of the building, the portico was closed off by a wall, in which 2 doors opened onto the courtyard. The whole is simply and carelessly built: the walls are of coarsely

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dressed stones faced with stucco and the columns were of poros.

Date: ca. 220 B.C.

Bibl. P. Roussel, Les cultes égyptiens à Délos (Nancy, 1916) p. 19-32.

60b. DELOS—OIKOS OF THE NAXIANS (Photograph Ecole française d'Athènes). View of the eastern part and the prostoon from the north. The oikos was excavated by the Ecole française d'Athènes, directly to the right of the propylaea of the sanctuary of Apollo. The edifice consists of two parts. The first part, or oikos proper, is a long (26.07 m.) narrow building, wider on the west façade (10 m.) than on the east façade (9.43 m.). The prodomus, with a crepis of 3 steps and probably 2 columns in antis, is on the west façade. Λ door opens into the oikos (8.64 m./8.20 m. by 19.38 m.), which has a fairly steeply sloping floor

paved with marble slabs. It is divided into 2 aisles by a row of 8 slender Ionic columns on high cylindrical, unfluted bases, in turn mounted on flat round stones. The walls are built of large blocks of granite, alternated with slabs of gneiss. Another door is located roughly in the centre of the north wall. A second part, the prostoon, was later added on the east side; it is a portico with 4 columns mounted on curious bases: a slightly incurved block as scotia and a plain cylindrical block as torus. The building served as a repository for votive offerings and also as a hall for meetings and ritual banquets.

Date: the oikos dates from the first years of the VIth century B.C. and the prostoon from about 560 B.C.; traces of a structure of the geometric period (VIIth century B.C.) were found under the prostoon in 1909.

Bibl. F. Courby, Le sanctuaire d'Apollon Délien, III Constructions naniennes, BCH 45 (1921) p. 233-241.

В. TREASURIES

61a-b. DELPHI—treasuries of the marmaria (1961). Plate 61a: view from the northeast: on the left, the Doric treasury, on the right, the Massalian treasury, on the far right, the Tholos; PLATE 61b: the Massalian treasury, detail of the southeast corner. Both treasuries, situated directly to the east of the Tholos (Plates 46-47a), were excavated by the Ecole française d'Athènes in 1901.

- 1) The Massalian treasury, which measures 6.37 m. by 8.63 m. on the first step of the crepis, is built in the form of a small temple in antis with 2 columns in antis. The foundations and the bottom step of the crepis are of limestone blocks, while the second step of the crepis (as also the rest of the edifice) is of Parian marble; the crepis does not lie quite straight on the euthynteria. The toichobate is treated as a torus with flutes. 2 Aeolic columns, 5.30 m. high with a base diameter of 0.49 m. and 22 flutes, stood on the largely preserved stylobate. Date: 535/530 B.C.
- 2) The anonymous Doric treasury is also a temple in antis with 2 columns in antis and measures 7.28 m. by 10.41 m. on the euthynteria. The foundations are of limestone, the marble crepis has 3 steps and the walls were supported on a socle of orthostates (0.67 m. high). The Doric columns were 4.23 m. high with a base diameter of 0.65 m. and 20 flutes; the interaxial measurement was 1.27 m. A frieze of triglyphs (width

the building. This treasury is in many respects similar to that of the Athenians (Plates 62/63a). Date: 490/460 B.C.

Bibl. G. DAUX, Fouilles de Delphes, Les deux trésors (Paris, 1925).

62-63a. DELPHI—ATHENIAN TREASURY (1961). PLATE 62a: the east façade; PLATES 62b and 63a: details of the entablature of the east façade. The treasury was excavated by the Ecole française d'Athènes from 1893 to 1894; its reconstruction dates from 1903-1906. It is a small building in the form of a Doric temple in antis (6.78 m. by 9.84 m. and about 7.59 m. high). The foundations, of local grey limestone, comprise 4 layers on the north side and 6 on the south side. The 3 layers of the crepis, which is of marble, do not, properly speaking, form a stairway, since each has a projection of only 0.05 m. The third layer constitutes the stylobate and consists of 7 blocks 0.84 m. wide. The walls are built of rectangular blocks in isodomic courses: 12 courses ± 0.37 m. high supported on a socle of orthostates; the average thickness of the walls is 0.49 m. The columns are 4.13 m. high with a base diameter of 0.75 m. and 20 flutes; the interaxial measurement is 2.18 m.; the shafts lean 0.016 m. inwards. The space between the columns and the antae was closed off by bronze lattices and between the 2 columns there was a door. The architrave on the east façade is 0.41 m.) and metopes (width 0.62 m.) ran around 0.70 m. high; the regulae have 5 guttae and the

mutulae 3 rows of 6 guttae. The triglyphs and metopes are 0.67 m. high and the latter are 0.36 m. wide and adorned with sculpture. The superstructure is entirely of Parian marble; some fragments of the polychrome decoration are still visible. The architect is unknown.

Date: probably after 490 B.C. (also according to Pausanias); some authors accept an earlier date 510/506 B.C.

Bibl. J. Audiat, Fouilles de Delphes, Le Trésor des Athéniens (Paris, 1933).

63b. DELOS—TREASURY NO. 1 (Photograph Ecole française d'Athènes). View from the north. Situated at the northern end of the Stoa of the Bulls, this small building is the easternmost of a series of 5 treasuries in the sanctuary of Apollo. It is in the form of a small Doric temple in antis with 2 columns in antis and measures 7.92 m. by 12.60 m. The foundations resemble those of the Temple of Apollo. Of the superstructure, only a few marble orthostates, the doorsill of the naos and 2 blocks of the stylobate remain. The naos measures 6.45 m. by 8.30 m. Built up against the west wall on the outside are the remains of a large square base with steps (the crepis, measuring 2.74 m. by 2.95 m.) and a sort of marble basin: a περιραντήριον or an altar. A little further to the north lies a similar, but smaller base. The purpose of the building is not known; it has traditionally been called a treasury, although properly so-called treasuries were unknown at Delos; probably it was an oikos.

Date: 540/450 B.C.

Bibl. M. HOLLEAUX, Travaux enécutés dans l'île de Délos pendant l'année 1907, CRAI (1908) p. 171.

64a-b. OLYMPIA—SICYONIAN TREASURY (1961). PLATE 64a: view from the south; PLATE 64b: view from the west. Against the slope of the Kronion Hill, on the north side of the Altis, on a terrace situated about 3 m. higher up, stands a row of 12 treasuries all facing south. These were built at different times over the course of the years and the stairway of the terrace was only added in the last quarter of the IVth century B.C. The first treasury to the east of the Nympheum is that of Sicyon, which is in the form of a small Doric temple in antis with 2 columns in antis and measures 6.73 m. by 11.85 m. The north side of it is founded on the solid rock, while the south side rests on foundations 3.40 m. deep, consisting of poros blocks, broken stones and mud. The crepis has 2 steps and on it stood a row of orthostates. The wall masonry was laid in such a way that all the joints fell above the centre of an underlying stone. The columns are 3.48 m. high and have a slight entasis. The pronaos was closed off with lattices. A frieze of triglyphs and metopes ran around the outside of the building, while a moulding of meanders and a Doric cymatium adorned the top of the walls in the naos. The treasury is built of finegrained limestone, probably brought from Sicyon, and numerous traces of its polychrome decoration are still visible; the roof tiles were of marble. The building has been precisely identified, thanks to an inscription.

Date: middle of the Vth century B.C. Many of the stones were later used to build the Byzantine church.

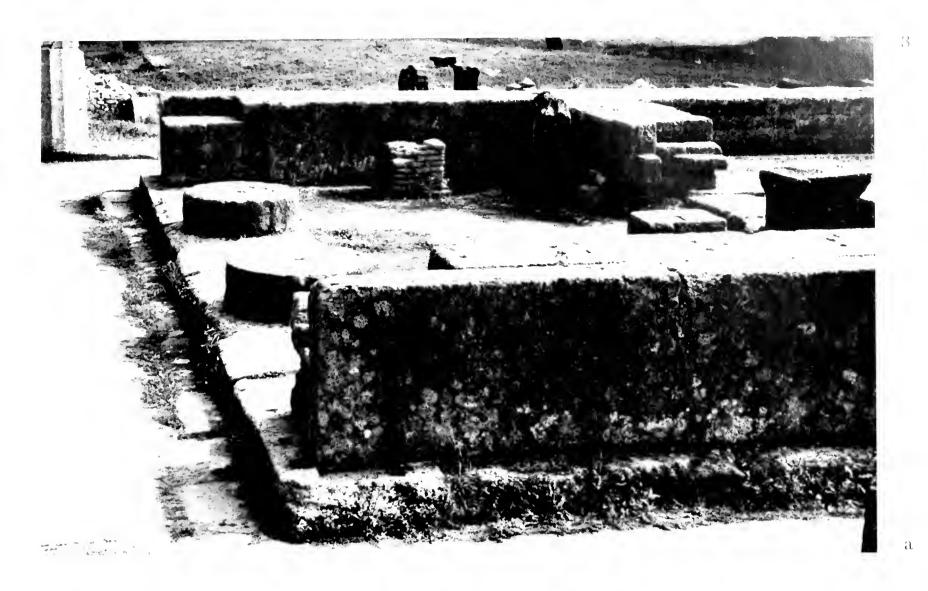
Bibl. E. Curtius & F. Adler, Olympia. II, Die Baudenkmäler; see W. Dörpfeld, V Schatzhaus von Sikyon, p. 40-44.

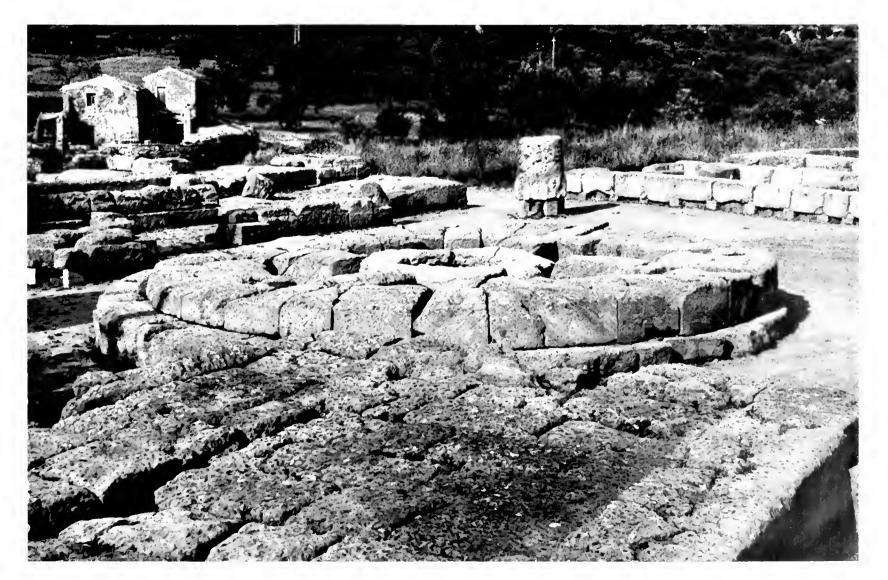
























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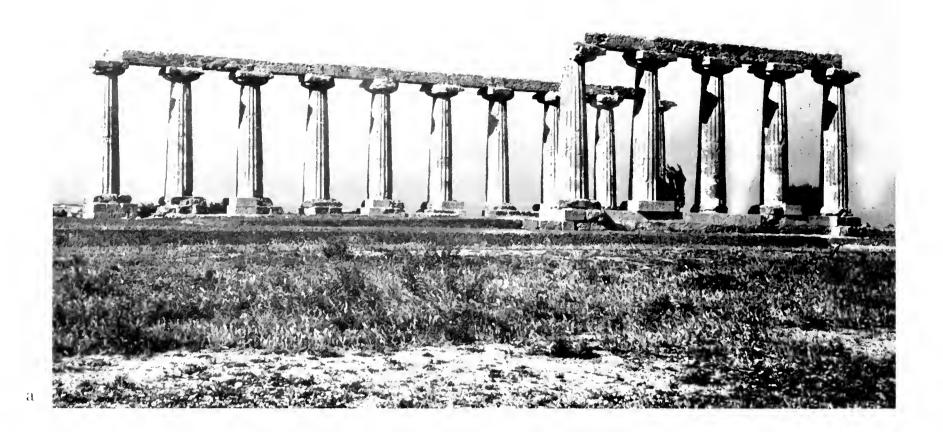
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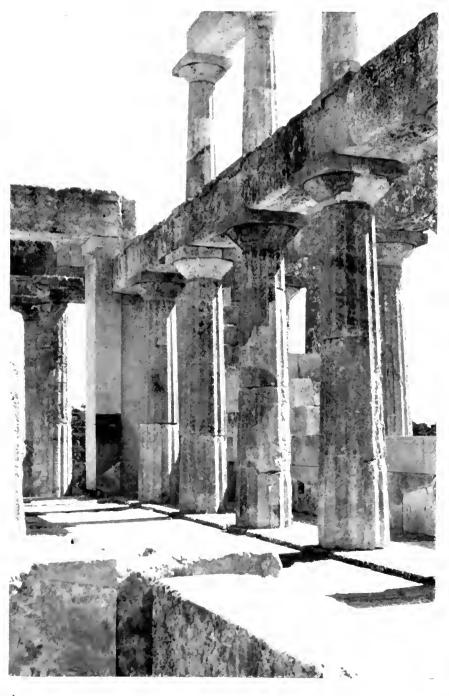














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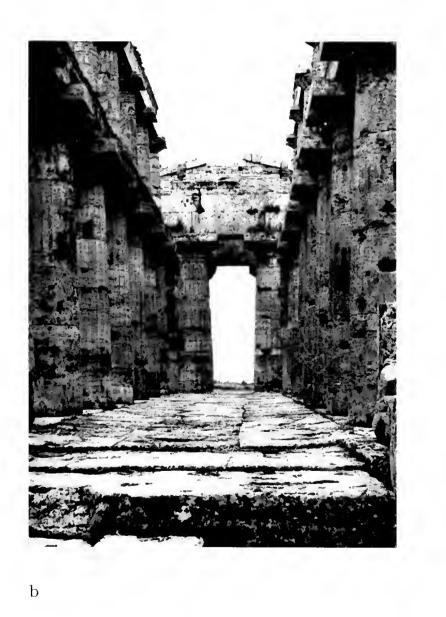






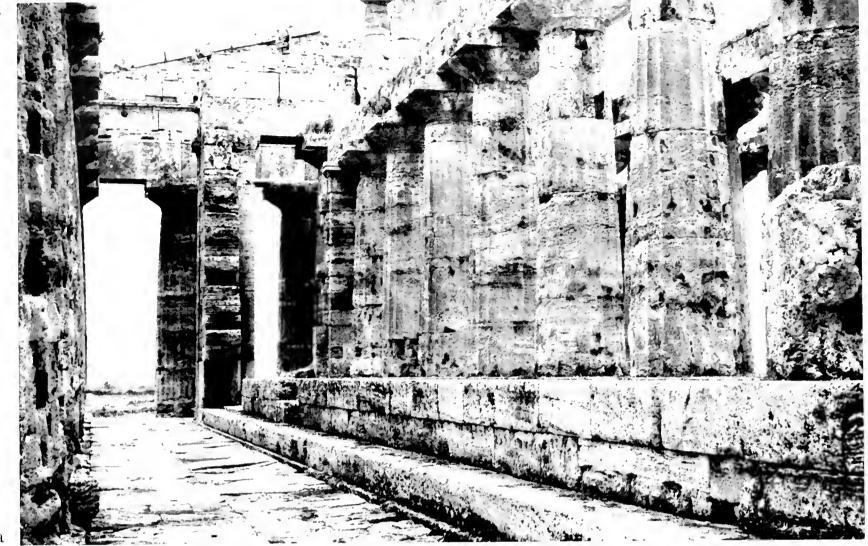




















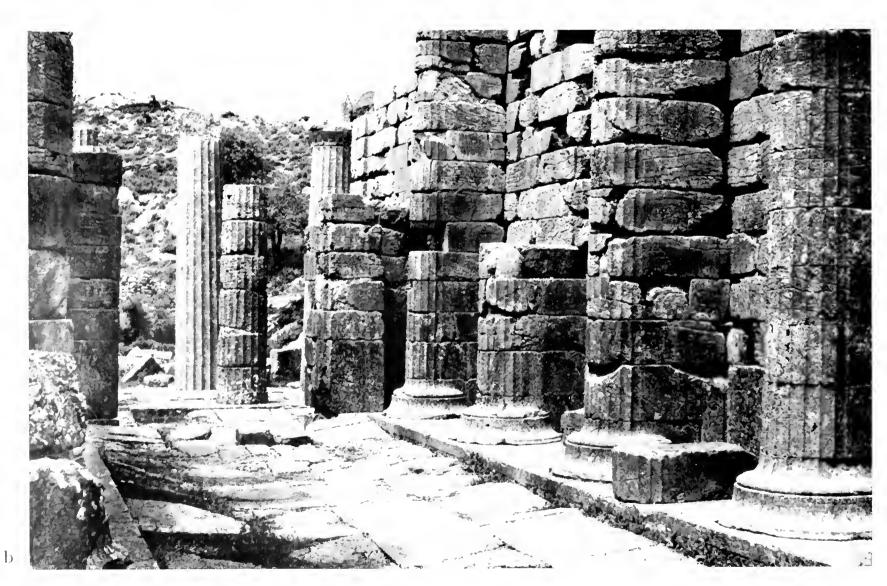


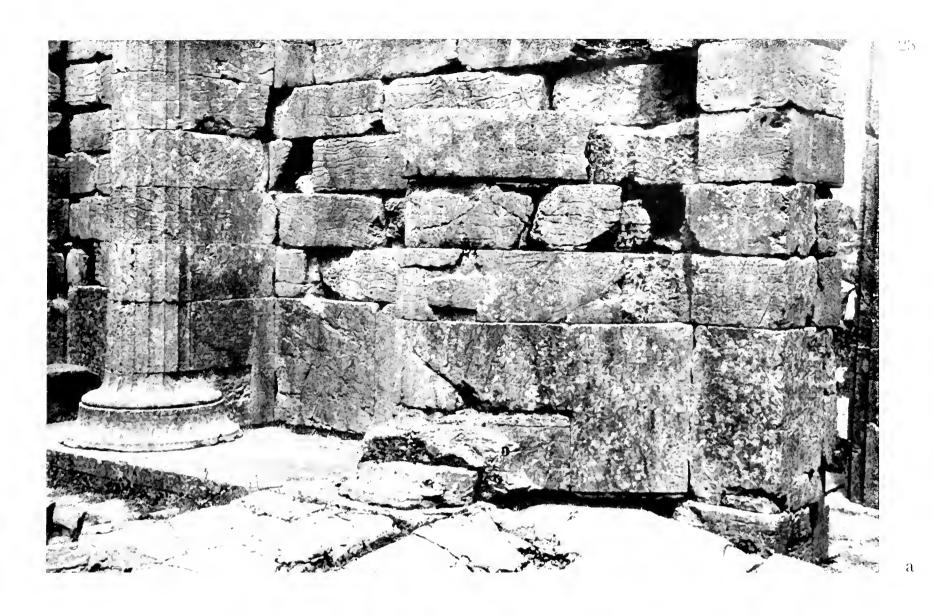


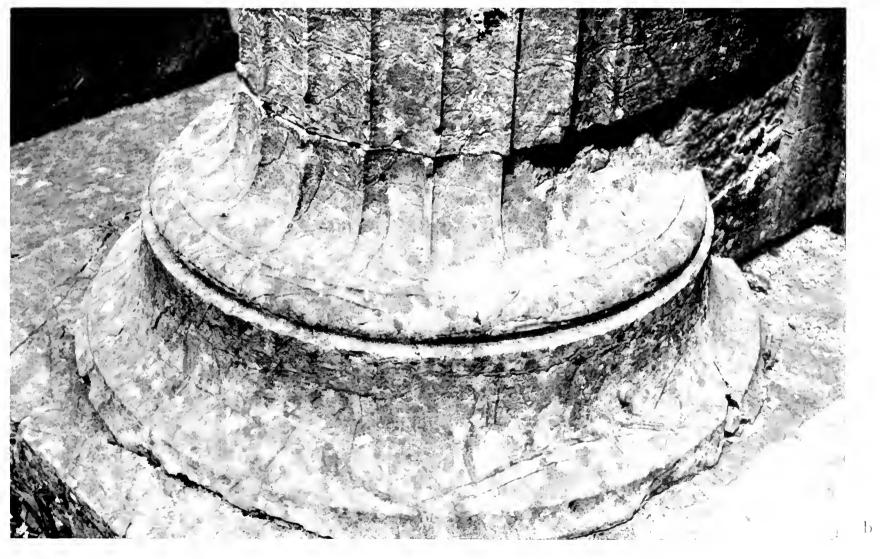














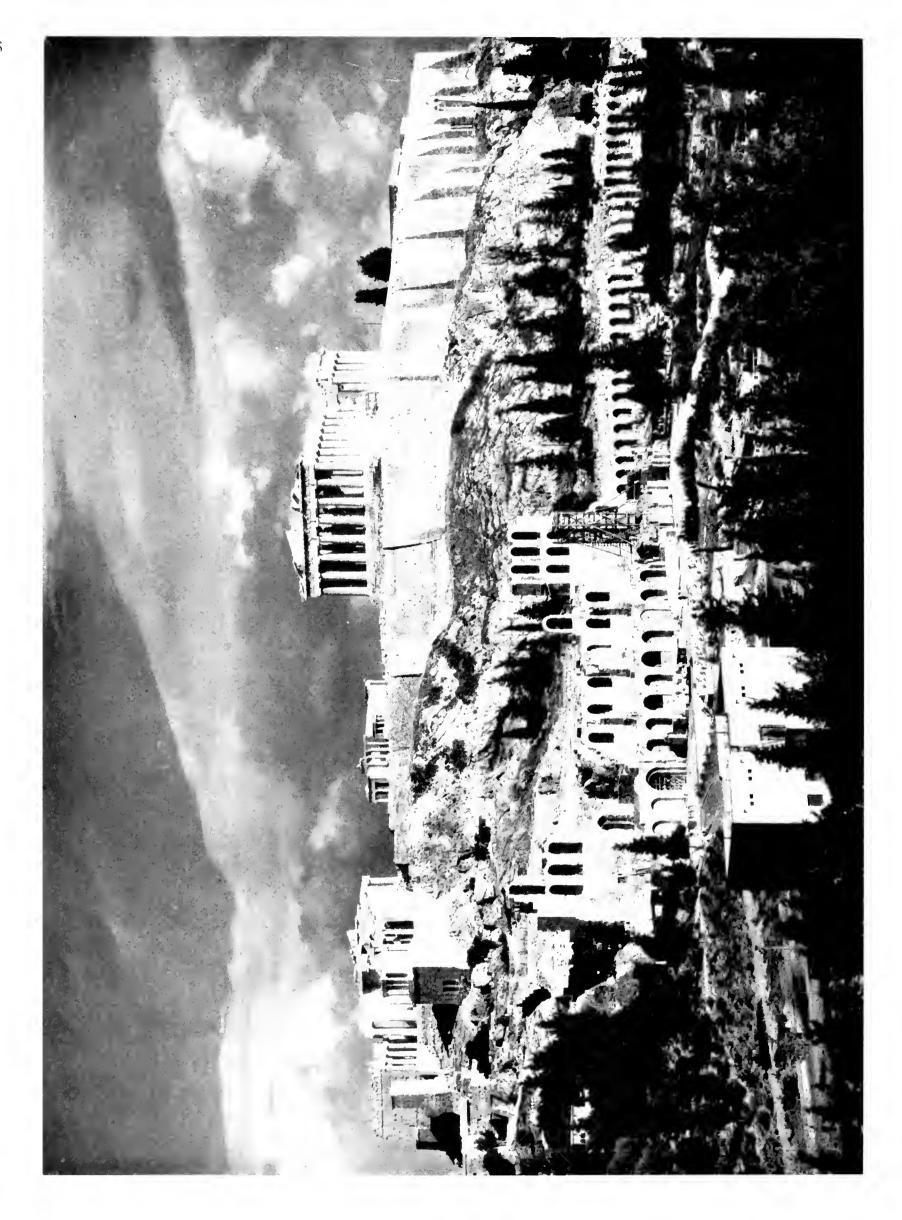




























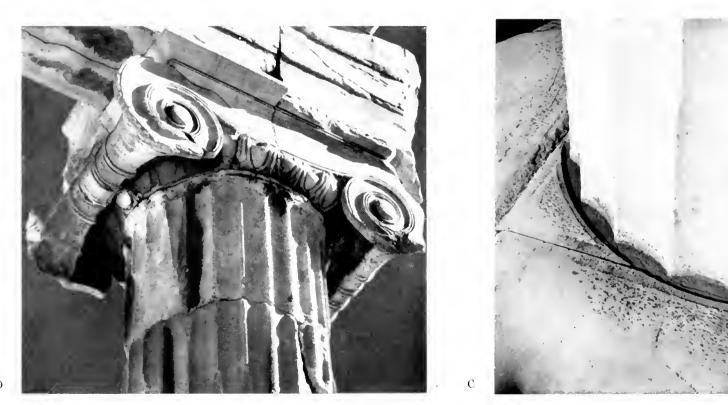
















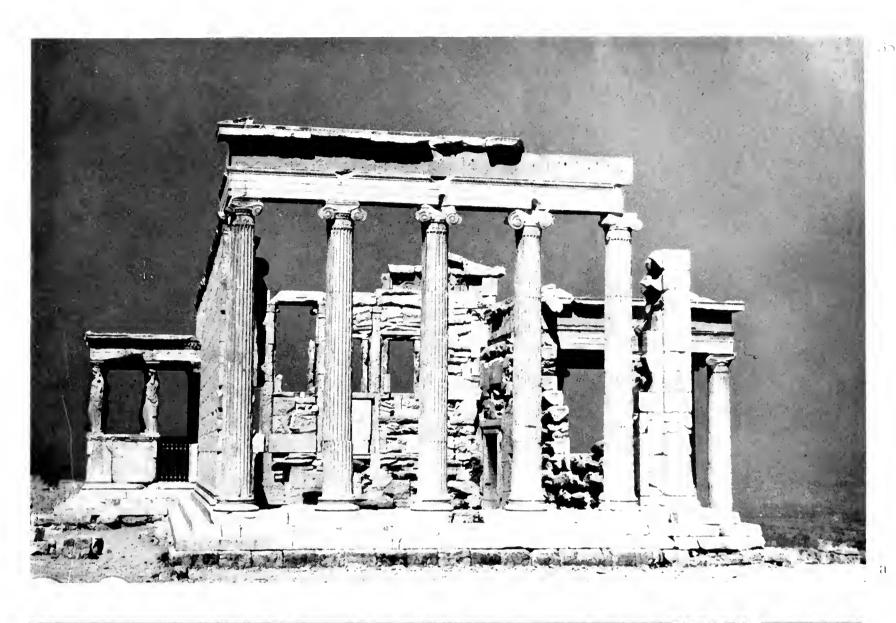


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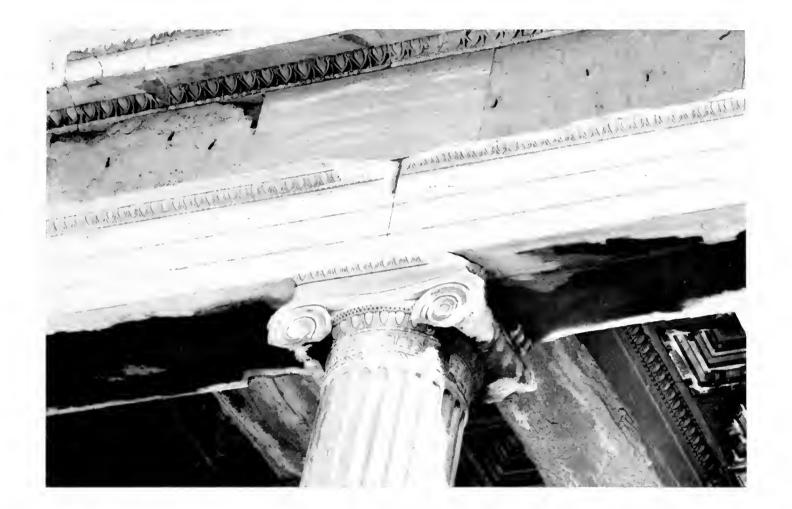












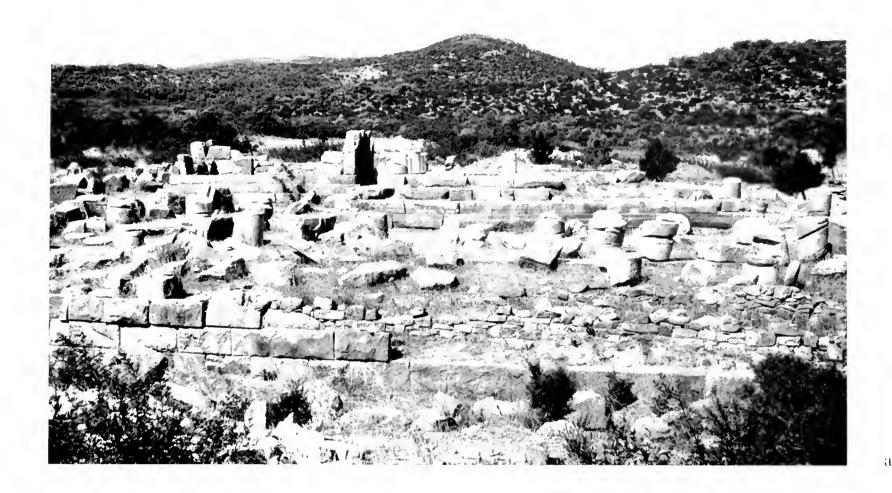










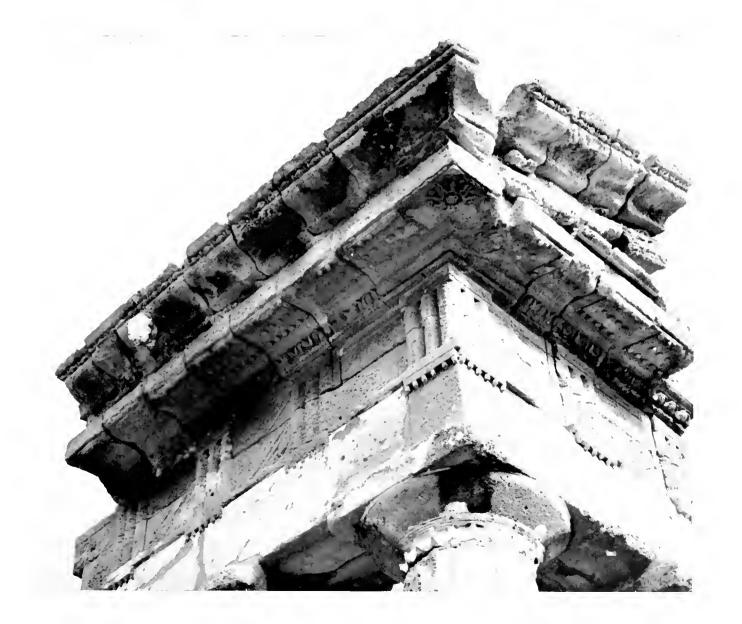










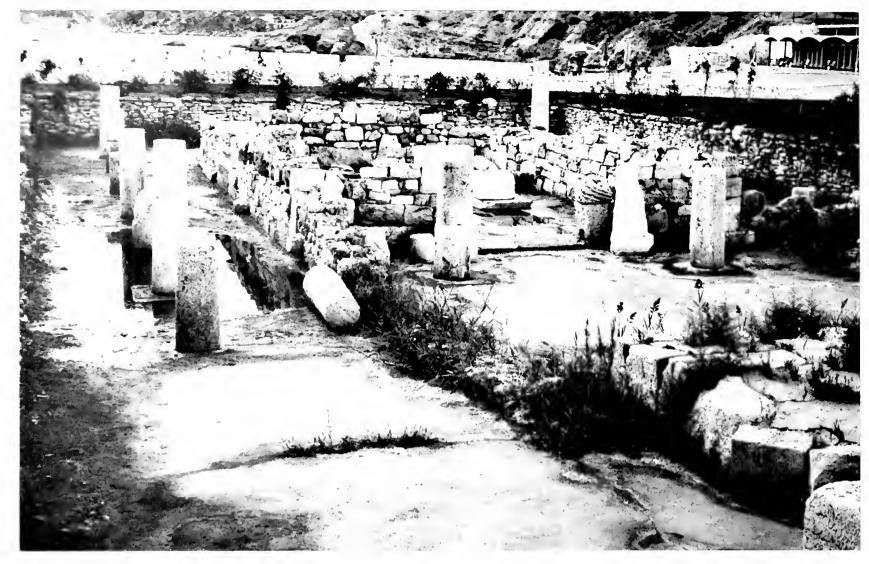
















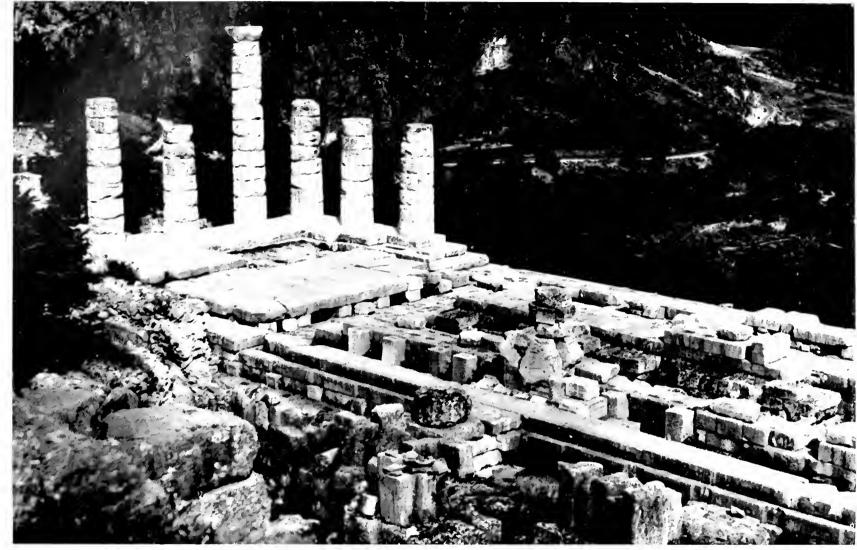






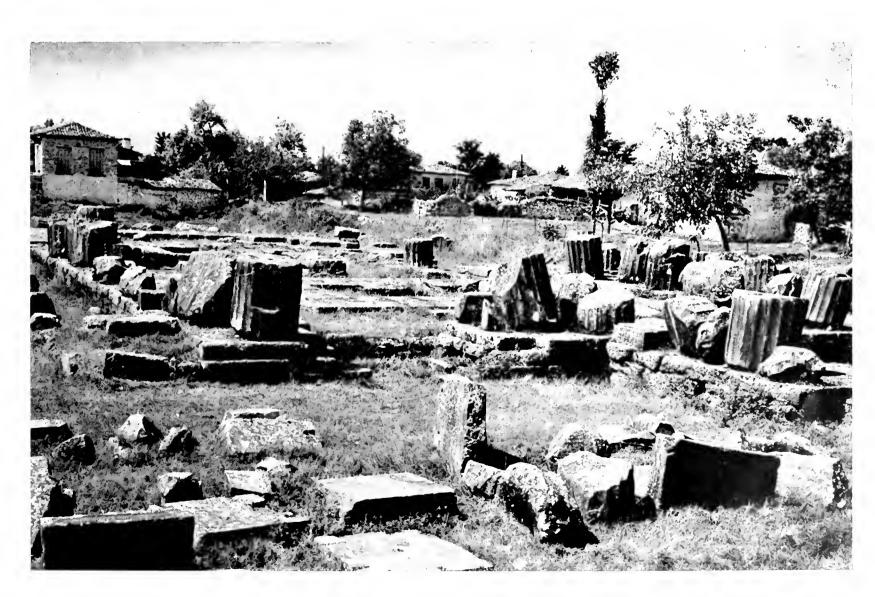




















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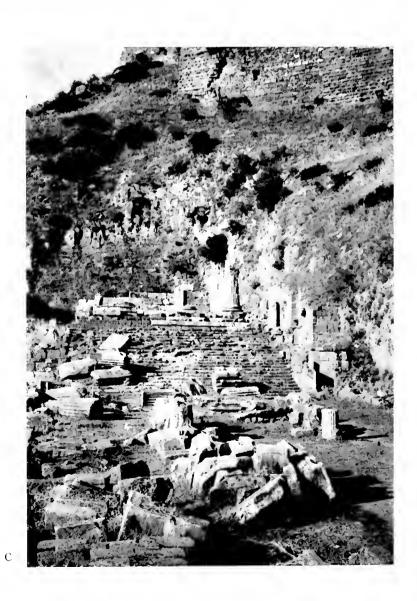
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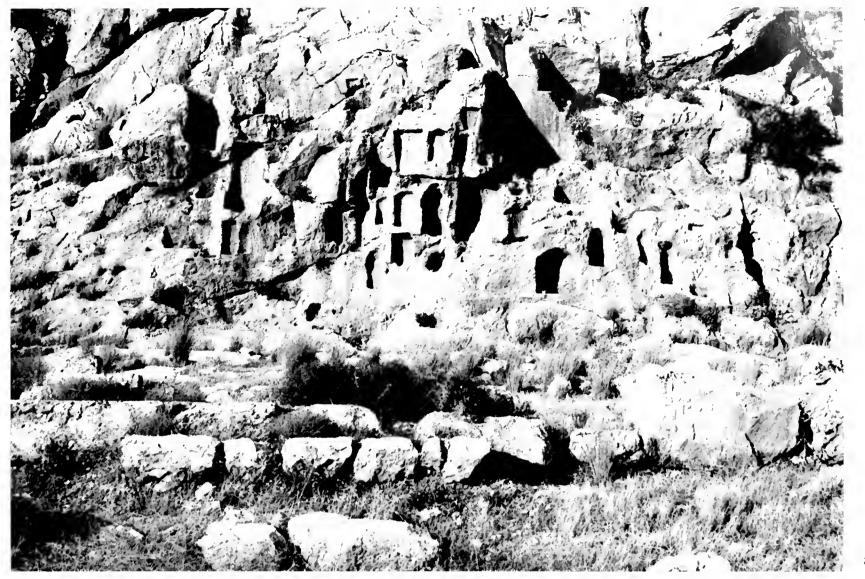
















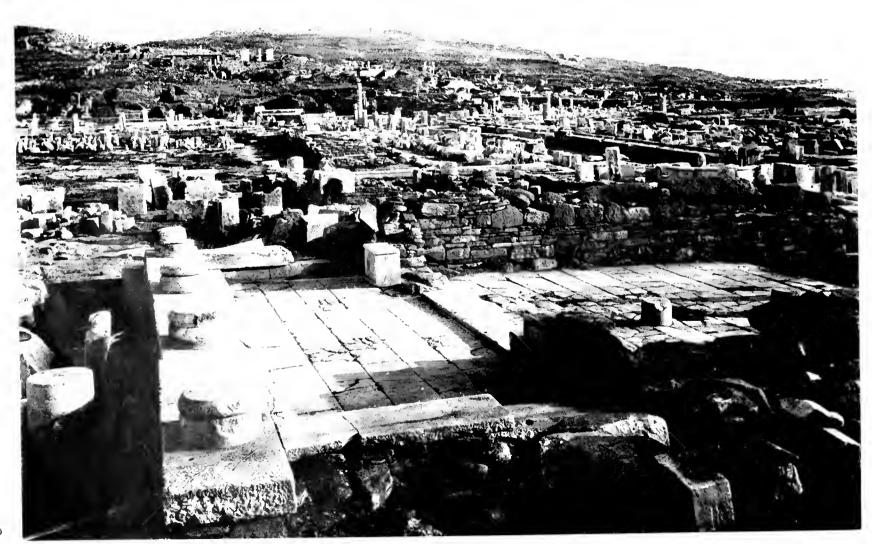
















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